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20020198896
5615361
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6226637
6226637



Inventor Information for 10/608083

Inventor Name	City	State/Country
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CHAUDHURI, SURAJIT	REDMOND	WASHINGTON

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- ☐ 1. **Large join optimization on a hypercube multiprocessor**
Lin, E.T.; Omiecinski, E.R.; Yalamanchili, S.;
[Knowledge and Data Engineering, IEEE Transactions on](#)
Volume 6, Issue 2, April 1994 Page(s):304 - 315
Digital Object Identifier 10.1109/69.277773
[AbstractPlus](#) | Full Text: [PDF](#)(1180 KB) IEEE JNL
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- ☐ 2. **Parallel optimization of large join queries with set operators and aggrega
environment supporting pipeline**
Spiliopoulou, M.; Hatzopoulos, M.; Cotronis, Y.;
[Knowledge and Data Engineering, IEEE Transactions on](#)
Volume 8, Issue 3, June 1996 Page(s):429 - 445
Digital Object Identifier 10.1109/69.506710
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(1580 KB) IEEE JNL
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- ☐ 3. **Optimizing queries with foreign functions in a distributed environment**
Tsai, P.S.M.; Chen, A.L.P.;
[Knowledge and Data Engineering, IEEE Transactions on](#)
Volume 14, Issue 4, July-Aug. 2002 Page(s):809 - 824
Digital Object Identifier 10.1109/TKDE.2002.1019215
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(457 KB) IEEE JNL
[Rights and Permissions](#)
- ☐ 4. **Bayesian retrieval in associative memories with storage errors**
Sommer, F.T.; Dayan, P.;
[Neural Networks, IEEE Transactions on](#)
Volume 9, Issue 4, July 1998 Page(s):705 - 713
Digital Object Identifier 10.1109/72.701183
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(256 KB) IEEE JNL
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- ☐ 1. **Stochastic gradient adaptation under general error criteria**
 Douglas, S.C.; Meng, T.H.-Y.;
Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Sig
IEEE Transactions on]
 Volume 42, Issue 6, June 1994 Page(s):1335 - 1351
 Digital Object Identifier 10.1109/78.286951
 AbstractPlus | Full Text: [PDF\(1456 KB\)](#) IEEE JNL
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- ☐ 2. **A maximum-likelihood surface estimator for dense range data**
 Whitaker, R.T.; Gregor, J.;
Pattern Analysis and Machine Intelligence, IEEE Transactions on
 Volume 24, Issue 10, Oct. 2002 Page(s):1372 - 1387
 Digital Object Identifier 10.1109/TPAMI.2002.1039208
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Motwani, M.C.; Qiang Ji;
[Image Processing, 2001. Proceedings. 2001 International Conference on](#)
Volume 1, 7-10 Oct. 2001 Page(s):1050 - 1053 vol.1
Digital Object Identifier 10.1109/ICIP.2001.959229
[AbstractPlus](#) | Full Text: [PDF](#)(456 KB) IEEE CNF
[Rights and Permissions](#)
- ☐ 2. **Fragmenting relations horizontally using a knowledge-based approach**
Shin, D.-G.; Irani, K.B.;
[Software Engineering, IEEE Transactions on](#)
Volume 17, Issue 9, Sept. 1991 Page(s):872 - 883
Digital Object Identifier 10.1109/32.92906
[AbstractPlus](#) | Full Text: [PDF](#)(1080 KB) IEEE JNL
[Rights and Permissions](#)
- ☐ 3. **Limitations and benefits of cooperative proxy caching**
Dykes, S.G.; Robbins, K.A.;
[Selected Areas in Communications, IEEE Journal on](#)
Volume 20, Issue 7, Sep 2002 Page(s):1290 - 1304
Digital Object Identifier 10.1109/JSAC.2002.801750
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(376 KB) IEEE JNL
[Rights and Permissions](#)
- ☐ 4. **Efficient XML query processing in mediators**
Liang Huai Yang; Shiwei Tang; Dongqing Yang; Lijun Chen;
[Database and Expert Systems Applications, 2001. Proceedings. 12th Internati](#)
3-7 Sept. 2001 Page(s):27 - 31
Digital Object Identifier 10.1109/DEXA.2001.953037
[AbstractPlus](#) | Full Text: [PDF](#)(336 KB) IEEE CNF
[Rights and Permissions](#)
- ☐ 5. **Efficient expressions for completely and partly unsuccessful batched se**
structured files
Lang, S.D.; Manolopoulos, Y.;
[Software Engineering, IEEE Transactions on](#)
Volume 16, Issue 12, Dec. 1990 Page(s):1433 - 1435
Digital Object Identifier 10.1109/32.62451

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- ☐ 1. **A query evaluation strategy for deductive databases with presence of ne**
HLPN
Barkaoui, K.; Majzi, Y.;
[Systems, Man, and Cybernetics, 1997. 'Computational Cybernetics and Simula](#)
[International Conference on](#)
Volume 3, 12-15 Oct. 1997 Page(s):2386 - 2391 vol.3
Digital Object Identifier 10.1109/ICSMC.1997.635284
[AbstractPlus](#) | Full Text: [PDF](#)(536 KB) IEEE CNF
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- ☐ 2. **The query clustering problem: a set partitioning approach**
Gopal, R.D.; Ramesh, R.;
[Knowledge and Data Engineering, IEEE Transactions on](#)
Volume 7, Issue 6, Dec. 1995 Page(s):885 - 899
Digital Object Identifier 10.1109/69.476495
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(1648 KB) IEEE JNL
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- ☐ 3. **User defined aggregates in object-relational systems**
Wang, H.; Zaniolo, C.;
[Data Engineering, 2000. Proceedings. 16th International Conference on](#)
29 Feb.-3 March 2000 Page(s):135 - 144
Digital Object Identifier 10.1109/ICDE.2000.839400
[AbstractPlus](#) | Full Text: [PDF](#)(116 KB) IEEE CNF
[Rights and Permissions](#)
- ☐ 4. **Query planning with limited source capabilities**
Li, C.; Chang, E.;
[Data Engineering, 2000. Proceedings. 16th International Conference on](#)
29 Feb.-3 March 2000 Page(s):401 - 412
Digital Object Identifier 10.1109/ICDE.2000.839440
[AbstractPlus](#) | Full Text: [PDF](#)(192 KB) IEEE CNF
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- ☐ 5. **Evaluation and optimization of the LIVING IN A LATTICE rule language**
Riedel, H.; Heuer, A.;
[Data Engineering, 1996. Proceedings of the Twelfth International Conference](#)
26 Feb.-1 March 1996 Page(s):318 - 325

Digital Object Identifier 10.1109/ICDE.1996.492179

[AbstractPlus](#) | Full Text: [PDF](#)(848 KB) IEEE CNF
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☐ **6. A functional clustering method for optimal access to complex domains in DBMS**

Cheiney, J.; Kiernan, G.;

Data Engineering, 1988. Proceedings. Fourth International Conference on
1-5 Feb. 1988 Page(s):394 - 401

Digital Object Identifier 10.1109/ICDE.1988.105483

[AbstractPlus](#) | Full Text: [PDF](#)(616 KB) IEEE CNF
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☐ **7. Dynamic three-dimensional linear programming**

Eppstein, D.;

Foundations of Computer Science, 1991. Proceedings., 32nd Annual Symposium
1-4 Oct. 1991 Page(s):488 - 494

Digital Object Identifier 10.1109/SFCS.1991.185410

[AbstractPlus](#) | Full Text: [PDF](#)(592 KB) IEEE CNF
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☐ **8. A model for optimizing deductive and object-oriented DB requests**

Cheiney, J.-P.; Lancelotte, R.S.G.;

Data Engineering, 1992. Proceedings. Eighth International Conference on
2-3 Feb. 1992 Page(s):385 - 392

Digital Object Identifier 10.1109/ICDE.1992.213171

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Rowe, N.C.;
[Software Engineering, IEEE Transactions on](#)
Volume SE-11, Issue 10, Oct. 1985 Page(s):1081 - 1091
[AbstractPlus](#) | Full Text: [PDF](#)(4744 KB) IEEE JNL
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- ☐ 2. **Domains and active domains: what this distinction implies for the estimation projection sizes in relational databases**
Ciaccia, P.; Maio, D.;
[Knowledge and Data Engineering, IEEE Transactions on](#)
Volume 7, Issue 4, Aug. 1995 Page(s):641 - 655
Digital Object Identifier 10.1109/69.404035
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IEEE CNF IEEE Conference Proceeding

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- ☐ **1. SQL Test Suite goes online**
Sullivan, J.;
[Computer](#)
Volume 30, Issue 6, June 1997 Page(s):103, 105
Digital Object Identifier 10.1109/2.587557
[AbstractPlus](#) | Full Text: [PDF](#)(388 KB) **IEEE JNL**
[Rights and Permissions](#)
- ☐ **2. System for database reports generating**
Tarassenko, P.F.; Bukharova, M.S.;
[Science and Technology, 2001. KORUS '01. Proceedings. The Fifth Russian-International Symposium on](#)
Volume 1, 26 June-3 July 2001 Page(s):84 - 88 vol.1
Digital Object Identifier 10.1109/KORUS.2001.975063
[AbstractPlus](#) | Full Text: [PDF](#)(455 KB) **IEEE CNF**
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- ☐ **3. Domain reduction dependencies: A new type of dependency for statistical security**
Hansen, S.C.; Unger, E.A.;
[Computer Security Applications Conference, 1991. Proceedings., Seventh Annual](#)
2-6 Dec. 1991 Page(s):178 - 186
Digital Object Identifier 10.1109/CSAC.1991.213007
[AbstractPlus](#) | Full Text: [PDF](#)(680 KB) **IEEE CNF**
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- ☐ **4. An extended memoryless inference control model: partial-table level support**
Hansen, S.C.; Unger, E.A.;
[Applied Computing, 1991.. \[Proceedings of the 1991\] Symposium on](#)
3-5 April 1991 Page(s):142 - 149
Digital Object Identifier 10.1109/SOAC.1991.143866
[AbstractPlus](#) | Full Text: [PDF](#)(508 KB) **IEEE CNF**
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|------------|---|
| <u>#1</u> | (((optimizing<in>metadata) <and> (query<in>metadata))
<and> (estimating<in>metadata)) <and> (pyr >= 1950 <and>
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| <u>#2</u> | (((optimizing<in>metadata) <and> (query<in>metadata))
<and> (estimating<in>metadata)) <and> (pyr >= 1950 <and>
pyr <= 2002) |
| <u>#3</u> | (((conditional<in>metadata) <and>
(expressions<in>metadata))<and> (optimize<in>metadata))
<and> (pyr >= 1950 <and> pyr <= 2002) |
| <u>#4</u> | (((query<in>metadata) <and> (expressions<in>metadata))
<and> (estimated<in>metadata)) <and> (pyr >= 1950 <and>
pyr <= 2002) |
| <u>#5</u> | ((query<in>metadata) <and> (optimize<in>metadata))<and>
(recursively<in>metadata) |
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<and> (plan<in>metadata)) <and> (pyr >= 1950 <and> pyr <= 2002) |
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pyr <= 2002) |
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<and> (optimize<in>metadata)) <and> (pyr >= 1950 <and>
pyr <= 2002) |
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pyr <= 2002) |
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<and> (tables<in>metadata)) <and> (pyr >= 1950 <and> pyr
<= 2002) |

attribute of R , and Q an SQL query that contains $R.A$ in the SELECT clause. $SIT(R.A|Q)$ is the statistic for attribute A on the result of the executing query expression Q . Q is called the generating query expression of $SIT(R.A|Q)$. This definition can be extended for multi-attribute statistics. Furthermore, the definition can be used as the basis for extending the CREATE STATISTICS statement in SQL where instead of specifying the table name of the query, more general query expression such as a table valued expression can be used.

In U.S. Patent Application Serial No. 10/191,822, incorporated herein by reference in its entirety, the concept of SITs was introduced. A particular method of adapting a prior art query optimizer to access and utilize a preexisting set of SITs for cost estimation was described in detail in this application, which method is summarized here briefly as background information.

Referring to Figure 2, the query optimizer examines an input query and generates a query execution plan that most efficiently returns the results sought by the query in terms of cost. The cost estimation module and its imbedded cardinality estimation module can be modified to utilize statistics on query expressions, or intermediate tables, to improve the accuracy of cardinality estimates.

In general, the use of SITs is enabled by implementing a wrapper (shown in phantom in Figure 2) on top of the original cardinality estimation module of the RDBMS. During the optimization of a single query, the wrapper will be called many times, once for each different query sub-plan enumerated by the optimizer. Each time the query optimizer invokes the modified cardinality estimation module with a query plan, this input plan is transformed by the wrapper into another one that exploits SITs. The

is now US Patent # 6,947,927
filed
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cardinality estimation module uses the input plan to arrive at a potentially more accurate cardinality estimation that is returned to the query optimizer. The transformed query plan is thus a temporary structure used by the modified cardinality and is not used for query execution.

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According to the embodiment described in application serial number 10/191,822, the transformed plan that is passed to the cardinality estimation module exploits applicable SITs to enable a potentially more accurate cardinality estimate. The original cardinality estimation module requires little or no modification to accept the transformed plan as input. The transformation of plans is performed efficiently, which is important because the transformation will be used for several sub-plans for a single query optimization.

11/19/2006

In general, there will be no SIT that matches a given plan exactly. Instead, several SITs might be used for to some (perhaps overlapping) portions of the input plan. The embodiment described in application serial number 10/191,822 integrates SITs with cardinality estimation routines by transforming the input plan into an equivalent one that exploits SITs as much as possible. The transformation step is based on a greedy procedure that selects which SITs to apply at each iteration, so that the number of independence assumptions during the estimation for the transformed query plan is minimized. Identifying whether or not a SIT is applicable to a given plan leverages materialized view matching techniques as can be seen in the following example.

is now US patent # 6,947,927

In the query shown in Figure 3(a) $R \triangleright \triangleleft S$ and $R \triangleright \triangleleft T$ are (skewed) foreign-key joins. Only a few tuples in S and T verify predicates $\sigma_{S.a < 10}(S)$ and $\sigma_{T.b > 20}(T)$ and most tuples in R join precisely with these tuples in S and T . In the absence of SITs,

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Therefore error values must be estimated using efficient and coarse mechanisms. Existing information such as system catalogs or characteristics of the input query can be used but not additional information created specifically for such purpose.

IS NOUS US Patent # 6,947,927

1/19/2006

Application serial number 10/191,822 introduced an error function, $nInd$, that is simple and intuitive, and uses the fact that the independence assumption is the main source of errors during selectivity estimation. The overall error of a decomposition is defined as $S = Sel_{R_1}(P_1|Q_1) \cdot \dots \cdot Sel_{R_n}(P_n|Q_n)$ when approximated, respectively, using $H_{R_1}(A_1|Q'_1), \dots, H_{R_n}(A_n|Q'_n)$ ($Q'_i \subseteq Q_i$), as the total number of predicate independence assumptions during the approximation, normalized by the maximum number of independence assumptions in the decomposition (to get a value between 0 and 1). In symbols, this error function is as follows:

$$nInd(\{Sel_{R_i}(P_i|Q_i), H_{R_i}(A_i|Q'_i)\}) = \frac{\sum_i |P_i| \cdot |Q_i - Q'_i|}{\sum_i |P_i| \cdot |Q_i|}$$

Each term in the numerator represents the fact that P_i and $Q_i - Q'_i$ are independent with respect to Q_i , and therefore the number of predicate independent assumptions is $|P_i| \cdot |Q_i - Q'_i|$. In turn, each term in the denominator represents the maximum number of independence assumptions when $Q'_i = \emptyset$, i.e. $|P_i| \cdot |Q_i|$. As a very simple example, consider $S = Sel_R(R.a < 10, R.b > 50)$ and decomposition $S = Sel_R(R.a < 10 | R.b > 50) \cdot Sel_R(R.b > 50)$. If base table histograms $H(R.a)$ and $H(R.b)$ are used, the error using $nInd$ is $\frac{1 \cdot (1-0) + 1 \cdot (0-0)}{1 \cdot 1 + 1 \cdot 0} = 1/1 = 1$, i.e., one out of one independence assumptions (between

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Patents

Patents 1 - 10 on **optimizing query database tuples decomposing**. (0.75 seconds)

Apparatus and method for **decomposing database** queries for **database** management system including ...

US Pat. 5742806 - Filed Jan 31, 1994 - Sun Microsystems, Inc.

ROWID,15,4) can be of ORACLE for KSR (**Database** Note #21) evaluated using ROWID

... **Query** decomposition is done by making a number of 35 3.1 **Decomposing** ...

Exploitation of uniqueness properties using a 1-tuple condition for the optimization of SQL queries

US Pat. 5615361 - Filed Feb 7, 1995 - International Business Machines Corporation

Description of Related Art 15 Computer systems incorporating Relational **database**

Management System (RDBMS) software using a Structured **Query** Language (SQL) ...

Apparatus and method for **decomposing database** queries for **database** management system including ...

US Pat. 6289334 - Filed Jan 31, 1997 - Sun Microsystems, Inc.

3.1 **Decomposing** queries into subqueries We plan to build a **query** decomposer module

... FILEID,i) is true for **tuples** in the ith group of files for table t. ...

Exploitation of subsumption in **optimizing scalar subqueries**

US Pat. 6339768 - Filed Aug 13, 1998 - International Business Machines Corporation

Description of Related Art Computer systems incorporating Relational **database**

Management System (RDBMS) software using a Structured **Query** Language (SQL) ...

Storing fragmented XML data into a relational **database** by **decomposing** XML documents with ...

US Pat. 6643633 - Filed Jan 31, 2002 - International Business Machines Corporation

The rows are formally called **tuples**. A **database** will typically have many physical

... Thus, there is a need for an improved technique of **decomposing** an XML ...

Method for converting relational data into XML

US Pat. 6785673 - Filed Dec 28, 2001 - AT&T Corp.

The resulting **tuples** are sorted by the XML element in which they occur, ...

algorithm for **decomposing** an RXL view **query** into an optimal set of SQL queries. ...

System and methodology for join enumeration in a memory-constrained environment

US Pat. 6516310 - Filed Dec 6, 2000 - Sybase, Inc.

... Transactions on **Database** Systems, 1(3): 223-241, September 1976) that recursively

breaks up a calculus (QUEL) **query** into smaller pieces by **decomposing** ...

Method of generating attribute cardinality maps

US Pat. 6865567 - Filed Jan 19, 2000

A complete set of glossary is found in many undergraduate **database** text books,

including [Elmasri and Navathe, 1994], pp 137-177. 2.1 **Query** Optimization: An ...

Method and apparatus for **database query** decomposition


US Pat. 6816854 - Filed Jun 8, 2001 - Sun Microsystems, Inc.

Section 2 (of this **database** note) describes our **query** decomposition approach in
... This is mainly viewed as an OLTP-oriented technique, aimed at **optimizing** ...

Set containment join operation in an object/relational **database** management system

US Pat. 6728694 - Filed Apr 17, 2000 - NCR Corporation

Next, the algorithm 50 proceeds to the probing phase, where the **tuples** of R_{sig} and
... During the final verification phase, the **tuples** referred to in the (...

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Patents

Patents 11 - 19 on **optimizing query database tuples decomposing**. (0.05 seconds)

Calibration of logical cost formulae for queries in a heterogeneous DBMS using synthetic database

US Pat. 5412806 - Filed Aug 20, 1992 - Hewlett-Packard Company

Component2 is the cost of processing each of the selected **tuples**. ... responsibility for **decomposing** and executing the **query** over the participating dbmss. ...

Automated **query** optimization method using both global and parallel local optimizations for ...

US Pat. 4769772 - Filed Feb 28, 1985 - Honeywell Bull, Inc.

Work has been done on **decomposing** the IF-THEN- ELSE-ENDIF control construct as described in "Transaction Optimization in a Distributed **Database** Testbed ...

Generating one or more XML documents from a single SQL **query**

US Pat. 6636845 - Filed Jan 31, 2002 - International Business Machines Corporation

The rows are formally called **tuples**. A **database** will typically have many physical ... Thus, there is a need for an improved technique of **decomposing** an XML...

Generating one or more XML documents from a relational **database** using XPath data model

US Pat. 7174327 - Filed Jan 31, 2002 - International Business Machines Corporation

The rows are formally called **tuples**. A **database** will typically have many physical ... Thus, there is a need for an improved technique of **decomposing** an XML ...

Method of performing a parallel relational **database query** in a multiprocessor environment ...

US Pat. 5765146 - Filed Nov 4, 1993 - International Business Machines Corporation

Chen et al., "Schema Integration and **Query** Decomposition in a Distributed **Database** System Using a Knowledge Based Approach", Information Modelling and ...

View composition in a data base management system

US Pat. 5276870 - Filed Oct 9, 1990 - Hewlett-Packard Company

When the v.ew was translated into an equivalent **query** that re- node immediate above the view nod^ th are ob. . ij • • i t_ **tuples** of the materialized view ...

Semantic optimization of **query** order requirements using order detection by normalization in a ...

US Pat. 5619692 - Filed Feb 17, 1995 - International Business Machines Corporation

(RELATIONAL 45 **DATABASE** WRITINGS 1989-1991, CJ Date with Hugh Darwen, Chapter 10: The Role of Functional Dependencies in **Query** Decomposition for a ...

XML document stored as column data

US Pat. 6721727 - Filed Nov 29, 2000 - International Business Machines Corporation

The rows are formally called **tuples**. A **database** will typically have many 59 ... Thus, there is a need for an improved technique of **decomposing** an XML ...

Reducing **query** response time using tree balancing

US Pat. 5694591 - Filed May 2, 1995 - Hewlett Packard Company

Rather, according to the invention they should be For a given **query** tree, mere
are many ... When a **database** is queried, the optimizer struc- so result of ...



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Patents

Patents 1 - 8 on **optimizing query recursive selectivity value**. (0.30 seconds)

Query optimization with switch predicates

US Pat. 6581055 - Filed Sep 11, 2000 - Oracle International Corporation

By enabling more accurate estimates of the **selectivity** of a **query**, ... environment or **value** of a **query** variable), in which case no switch predicate need be ...

Database system with methods for performing cost-based estimates using spline histograms

US Pat. 6012054 - Filed Oct 23, 1997 - Sybase, Inc.

The Optimizer is responsible for **optimizing** the **query** tree. ... **value**—an extra floatingpoint **value** per cell—allows a more accurate **selectivity** estimate, ...

Selectivity estimation for processing SQL queries containing having clauses

US Pat. 6778976 - Filed Jan 10, 2001 - International Business Machines Corporation

The preferred embodiment approach obtains **selectivity** estimates for each possible ... In the context of the **value** for P(hurdle, g), the convolution method ...

Learning from empirical results in query optimization

US Pat. 6763359 - Filed Jun 6, 2001 - International Business Machines Corporation

By comparing the actual **selectivity** of the predicate with the estimated ... actual **value** (act) computed from the monitor information: $est = actual = stats * adj$; ...

Database system with methodology for distributing query optimization effort over large search spaces

US Pat. 6807546 - Filed May 8, 2003 - Sybase, Inc.

The first advantage is 50 that any **value** can be chosen for the quota. As described above by Lohmen (in "System for Adapting **Query** Optimization Effort to ...

Database system with methodology providing improved cost estimates for query strategies

US Pat. 6353826 - Filed Aug 27, 1999 - Sybase, Inc.

The Optimizer is responsible for **optimizing** the **query** tree. ... by most RDBMS vendors to do **selectivity** estimates, which eventually lead to cost estimates. ...

Query optimization by predicate move-around

US Pat. 5659725 - Filed Jun 6, 1994 - Lucent Technologies Inc.

Unlike the magic-set transformation, moved across **query** blocks, ... redundant predicates can lead to incorrect **selectivity** esti- within the same 1 minute, ...

System and methodology for join enumeration in a memory-constrained environment

US Pat. 6516310 - Filed Dec 6, 2000 - Sybase, Inc.

"Join enumeration" is a **recursive** process which iteratively adds another ... based on index selection; Alter predicate placement based on **selectivity**; ...

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optimizing query recursive estimating approxin

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Patents

Patents 1 - 3 on **optimizing query recursive estimating approximate**. (0.24 seconds)

Database system with methods for performing cost-based estimates using spline histograms

US Pat. 6012054 - Filed Oct 23, 1997 - Sybase, Inc.

The Optimizer is responsible for **optimizing** the **query** tree. The Optimizer performs a cost-based analysis for formulating a **query** execution plan. ...

Selectivity estimation for processing SQL queries containing having clauses

US Pat. 6778976 - Filed Jan 10, 2001 - International Business Machines Corporation

The preferred embodiment provides a mechanism for **estimating** the ... to carry out the **approximate** computation of P(hurdle, g) is to **approximate** the ...

Single-pass low-storage arbitrary probabilistic location estimation for massive data sets

US Pat. 7076487 - Filed Apr 11, 2002 - The Penn State Research Foundation

[I] Agrawal et al., System and Method For **Query** Optimization Using Quantile Values of a ... New Methods for **Estimating** Tail Probabilities and Extreme Value ...

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optimizing query recursive estimation tuples

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Patents

Patents 1 - 3 on **optimizing query recursive estimation tuples**. (0.40 seconds)

Method of generating attribute cardinality maps

US Pat. 6865567 - Filed Jan 19, 2000

Constant number of records per block: The number of **tuples** in each file block is the same ... In order to increase the **estimation** accuracy, some modern **query** ...

System and methodology for generating bushy trees using a left-deep tree join enumeration algorithm

US Pat. 7184998 - Filed Jun 20, 2003 - Sybase, Inc.

The optimizer is responsible for **optimizing** algorithm in a relational database system. The methodology the **query** tree. The optimizer performs a cost-based ...

Database system with methods for performing cost-based estimates using spline histograms

US Pat. 6012054 - Filed Oct 23, 1997 - Sybase, Inc.

The Optimizer is responsible for **optimizing** the **query** tree. ... an estimate assumes that there is uniform distribution of **tuples** within a given cell. ...

optimizing query recursive estimation tuples

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Patents

Patents 1 - 7 on **optimizing query recursive estimation**. (0.27 seconds)

System and methodology for generating bushy trees using a left-deep tree join enumeration algorithm

US Pat. 7184998 - Filed Jun 20, 2003 - Sybase, Inc.

The optimizer is responsible for **optimizing** algorithm in a relational database system. The methodology the **query** tree. The optimizer performs a cost-based ...

Database system with methodology for distributing **query** optimization effort over large search spaces

US Pat. 6807546 - Filed May 8, 2003 - Sybase, Inc.

As described above by Lohmen (in "System for Adapting **Query** Optimization Effort to ... This is because errors in selectivity **estimation** are compounded. ...

Method of generating attribute cardinality maps

US Pat. 6865567 - Filed Jan 19, 2000

This **recursive** process is carried out until a stopping condition, ... In order to increase the **estimation** accuracy, some modern **query** optimizers incorporate ...

Database system with methods for performing cost-based estimates using spline histograms

US Pat. 6012054 - Filed Oct 23, 1997 - Sybase, Inc.

The Optimizer is responsible for **optimizing** the **query** tree. ... the incorrect **estimation** of 45 distribution, runs the risk of selecting a poor **query** plan. ...

System and methodology for join enumeration in a memory-constrained environment

US Pat. 6516310 - Filed Dec 6, 2000 - Sybase, Inc.

"Join enumeration" is a **recursive** process which iteratively adds ... The first goal is to ensure that the chosen join strategy for any **query** is one which ...

System and method for dynamic data-mining and on-line communication of customized information

US Pat. 6266668 - Filed Aug 4, 1999 - Dryken Technologies, Inc.

When prediction/**estimation** is important, the neural network training algorithm ... (using all 3 levels—a **recursive** definition) link to the page in question. ...

Single-pass low-storage arbitrary probabilistic location **estimation** for massive data sets

US Pat. 7076487 - Filed Apr 11, 2002 - The Penn State Research Foundation

[I] Agrawal et al., System and Method For **Query** Optimization Using Quantile ... Low-Storage Quantile **Estimation**, Computational Statistics, 10(4), 311-325. ...

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Patents

Patents 1 - 9 on **optimizing query recursive statistics**. (0.28 seconds)

Iterative dynamic programming system for **query** optimization with bounded complexity ...

US Pat. 5671403 - Filed Dec 30, 1994 - International Business Machines Corporation
389-394, May, 1992) discuss the cost 15 efficient man **optimizing** over the ...
identification of the "**Recursive Query** Answering with Non-Horn Clauses", ...

System and method for generating uniqueness information for **optimizing** an SQL **query**

US Pat. 5890148 - Filed Dec 8, 1997 - International Business Machines Corporation
and system-held **statistics** on SQL **query** are determined using a **recursive** process
called the data to be accessed (the size of the table, the number of the ...

Evaluation strategy for execution of SQL queries involving recursion and table queues

US Pat. 5546570 - Filed Feb 17, 1995 - International Business Machines Corporation
and system held **statistics** on the data to be accessed (the size of the table,
... The DAG represents a **query** execution plan of a non-**recursive** SQL **query**. ...

Computer program product for enabling a computer to generate uniqueness information for ...

US Pat. 5696960 - Filed Jun 2, 1995 - International Business Machines Corporation
This step considers both the available access paths SQL **query** are determined
using a **recursive** process called (indexes, sequential reads, etc. ...

Query optimization by sub-plan memoization

US Pat. 6850925 - Filed May 15, 2001 - Microsoft Corporation
US B2 5 when executed combine to produce the desired **query** output. initially ...
the execution plan 106 is made up of a at the start of **optimizing** a **query**, ...

Query optimization with switch predicates

US Pat. 6581055 - Filed Sep 11, 2000 - Oracle International Corporation
The optimization of a **query** expanded in the manner described herein may be dynamic
or **recursive**. In other words, for a given **query** a first set of execution ...

System and method for filtering a document stream

US Pat. 6105023 - Filed Aug 18, 1997 - Dataware Technologies, Inc.
Document filtering is performed by using **recursive** inference to propagate ...
Document **statistics** are calculated once, when the **query** net 12 is added to the ...

Providing XML cursor support on an XML repository built on top of a relational database system

US Pat. 7013311 - Filed Sep 5, 2003 - International Business Machines Corporation
In addition, for each **recursive** iteration, a current a transaction will not be
... A replace operation for an XML node or sub-tree an XML **query** defined in a ...

Method and system for parallel processing of database queries

US Pat. 6968335 - Filed Nov 14, 2002 - Sesint, Inc.
In effect, this **recursive** partitioning is analogous to a binary search, ...

may increase as more effort can be expended in **optimizing** the code of the ...

optimizing query recursive statistics

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S2	7687	S1(7N)TABLE?
S3	2227874	FIELD? OR NODE? ? OR TUPLE? OR PROPERT? OR COLUMN? OR ATTRIBUT?
S4	3462	S3(5N) (APPROXIMAT? OR (ROUGH? OR CLOSE? OR ROUND OR BALLPARK?) (2N) (ESTIMAT? OR COMPUT? OR DETERMIN? OR TOTAL? OR TABULAT? OR CALCULAT? OR FIGUR? OR FORMULAT?))
S5	19076	QUERY? OR QUERIE? ?
S6	1676	S5(5N) (SELECT? OR SEL)
S7	277	S5(5N) (SEPARAT? OR DISASSOCIAT? OR DIS()ASSOCIAT? OR ABSTRACTED OR PARTITION? OR DIVID?)
S8	887	S5(5N) (PLAN??? ? OR CHART? OR OPTIMI? OR PRIORIT? OR ARRANG?)
S9	84596	S3(5N) (COMPUT? OR DETERMIN? OR TOTAL? OR TABULAT? OR CALCULAT? OR ESTIMAT? OR FIGUR? OR ASSESS? OR ASCRIB? OR CREAT? OR FORMULAT?)
S10	25	CARTESIAN(3N)PRODUCT? ?
S11	3	(MORGAN OR DEMORGAN OR DE()MORGAN) (3N) (TRANSFORM? OR CONVE-R? OR ALTER? OR MODIF? OR FORMULAT?)
S12	7687	S1 AND S2
S13	4	S12 AND S4 AND S8
S14	463	S4 AND S9
S15	4	S2 AND RELATIONAL AND S14
S16	0	S15 NOT S13
S17	1114	S2 AND RELATIONAL
S18	8	S17 AND (CONDITION? OR TERM? ? OR RULE? ?) (2N) (MET OR MEET-??? OR AGREE? OR EVEN OR CONGRUEN?)
S19	0	S18 AND S7
S20	1	S7 AND (CONDITION? OR TERM? ? OR RULE? ?) (2N) (MET OR MEET-?? OR AGREE? OR EVEN OR CONGRUEN?)
S21	13	S17 AND S7
S22	6	S21 AND S8
S23	22	S18:S22
S24	1	S14 AND S7
S25	1	S14 AND S10:S11
S26	5	S9 AND S10
S27	26	S22:S26
S28	25	S27 NOT S13
S29	24	S28 NOT (PR>2003 OR PR=2004:2007)
S30	41	S14 AND (TUPLE? OR ATTRIBUT?)
S31	1	S30 AND S10
S32	5	S30 AND S2
S33	4	S32 NOT S27
S34	1	S33 NOT S13
S35	1	S7 AND S6 AND S10
S36	0	S35 NOT S13

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S2	20670	S1(7N)TABLE?
S3	1456674	FIELD? OR NODE? ? OR TUPLE? OR PROPERT? OR COLUMN? OR ATTR-IBUT?
S4	18690	S3(5N) (APPROXIMAT? OR (ROUGH? OR CLOSE? OR ROUND OR BALLPARK?) (2N) (ESTIMAT? OR COMPUT? OR DETERMIN? OR TOTAL? OR TABULAT? OR CALCULAT? OR FIGUR? OR FORMULAT?))
S5	51284	QUERY? OR QUERIE? ?
S6	3726	S5(5N) (SELECT? OR SEL)
S7	1437	S5(5N) (SEPARAT? OR DISASSOCIAT? OR DIS()ASSOCIAT? OR ABSTRACTED OR PARTITION? OR DIVID?)
S8	1969	S5(5N) (PLAN??? ? OR CHART? OR OPTIMI? OR PRIORIT? OR ARRANG?)
S9	9580	CARTESIAN(2N)PRODUCT? ? OR CARTESIAN?
S10	74	(MORGAN OR DEMORGAN OR DE()MORGAN) (3N) (TRANSFORM? OR ALTER? OR CONVER? OR MODIF? OR FORMULAT?)
S11	12	S1(100N)S2(100N)S3:S4(100N)S5:S6(100N)S8(100N)S9:S10
S12	8	S2(100N)S3(100N)S5(100N)S8(100N)S9:S10
S13	0	S12 NOT S11

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S2	5449	S1(7N)TABLE?
S3	13333076	FIELD? OR NODE? ? OR TUPLE? OR PROPERT? OR COLUMN? OR ATTRIBUT?
S4	140448	S3(5N) (APPROXIMAT? OR (ROUGH? OR CLOSE? OR ROUND OR BALLPARK?) (2N) (ESTIMAT? OR COMPUT? OR DETERMIN? OR TOTAL? OR TABULAT? OR CALCULAT? OR FIGUR? OR FORMULAT?))
S5	143570	QUERY? OR QUERIE? ?
S6	3942	S5(5N) (SELECT? OR SEL)
S7	1417	S5(5N) (SEPARAT? OR DISASSOCIAT? OR DIS()ASSOCIAT? OR ABSTRACTED OR PARTITION? OR DIVID?)
S8	10933	S5(5N) (PLAN??? ? OR CHART? OR OPTIMI? OR PRIORIT? OR ARRANG?)
S9	1005670	S3(5N) (COMPUT? OR DETERMIN? OR TOTAL? OR TABULAT? OR CALCULAT? OR ESTIMAT? OR FIGUR? OR ASSESS? OR ASCRIB? OR CREAT? OR FORMULAT?)
S10	44180	CARTESIAN(3N) PRODUCT? ? OR CARTESIAN?
S11	230	(MORGAN OR DEMORGAN OR DE()MORGAN) (3N) (TRANSFORM? OR ALTER? OR CONVER? OR MODIF? OR FORMULAT?)
S12	56817	S1:S2 AND RELATIONAL?
S13	75	S12 AND S4
S14	8	S13 AND S8
S15	77	S12 AND S7 AND S8
S16	17	S15 AND SEPARAT?(3N) (QUERY? OR QUERIE? ?)
S17	0	S16 AND S10:S11
S18	167	S12 AND S10:S11
S19	130	S18 AND RELATIONAL?(2N) DATABASE?
S20	0	S19 AND S4 AND S8
S21	43	S19 AND S8
S22	14	S21 AND (TUPLE? OR ATTRIBUT?)
S23	14	S22 NOT S14
S24	7	RD (unique items)
S25	0	S12 AND S8 AND S11
S26	29	S21 NOT S22
S27	0	S26 AND S7
S28	2	S26 AND S6
S29	7	S6 AND S5 AND S8 AND S10
S30	58	S15 NOT (S14 OR S16 OR S22 OR S28)
S31	2	S30 AND S10:S11
S32	0	S30 AND S6 AND S10
S33	7	S29 AND S12
S34	1	S33 NOT (S14 OR S16 OR S22 OR S28)
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- ☐ 1. ☐ **A two phase optimization technique for XML queries with multiple regular path expressions**
Journal of Systems and Software, Volume 64, Issue 3, 15 December 2002, Pages 183-193
Tae-Sun Chung and Hyoung-Joo Kim
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(266 K\)](#)
- ☐ 2. ☐ **An effective query pruning technique for multiple regular path expressions**
Journal of Systems and Software, Volume 64, Issue 3, 15 December 2002, Pages 219-233
Chang-Won Park and Chin-Wan Chung
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(577 K\)](#)
- ☐ 3. ☐ **Optimizing execution of component-based applications using group instances**
Future Generation Computer Systems, Volume 18, Issue 4, March 2002, Pages 435-448
Michael D. Beynon, Tahsin Kurc, Alan Sussman and Joel Saltz
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(446 K\)](#)
- ☐ 4. ☐ **Wavelet transformation-based management of integrated summary data for distributed query processing**
Data & Knowledge Engineering, Volume 39, Issue 3, December 2001, Pages 293-312
Moon Jeung Joe, Kyu-Young Whang and Sang-Wook Kim
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(258 K\)](#)
- ☐ 5. ☐ **New capabilities in the HENP Grand Challenge Storage Access System and its application at RHIC**
Computer Physics Communications, Volume 140, Issues 1-2, 15 October 2001, Pages 179-188
L. Bernardo, H. Nordberg, D. Olson, A. Shoshani, A. Sim, A. Vaniachine, D. Zimmerman, B. Gibbard, R. Porter, T. Wenaus, *et al.*
[Abstract](#) | [Abstract + References](#) | [PDF \(289 K\)](#)
- ☐ 6. ☐ **Semantic information-based alternative plan generation for multiple query optimization**
Information Sciences, Volume 137, Issues 1-4, September 2001, Pages 103-133
Faruk Polat, Ahmet Cosar and Reda Alhajj
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(249 K\)](#)
- ☐ 7. ☐ **Optimization of web newspaper layout in real time**
Computer Networks, Volume 36, Issues 2-3, July 2001, Pages 311-321
J. González, I. Rojas, H. Pomares, M. Salmerón, A. Prieto and J. J. Merelo
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(616 K\)](#)
- ☐ 8. ☐ **Optimizing storage utilization in R-tree dynamic index structure for spatial databases**
Journal of Systems and Software, Volume 55, Issue 3, 15 January 2001, Pages 291-299

P. W. Huang, P. L. Lin and H. Y. Lin
[SummaryPlus](#) | [Full Text + Links](#) | [PDF](#) (267 K)

9. ☐ **Optimizing path query performance: graph clustering strategies**
Transportation Research Part C: Emerging Technologies, Volume 8, Issues 1-6, February-December 2000, Pages 381-408
Yun-Wu Huang, Ning Jing and Elke A. Rundensteiner
[SummaryPlus](#) | [Full Text + Links](#) | [PDF](#) (209 K)
10. ☐ **Architecture and quality in data warehouses: An extended repository approach**
Information Systems, Volume 24, Issue 3, May 1999, Pages 229-253
Matthias Jarke, Manfred A. Jeusfeld, Christoph Quix and Panos Vassiliadis
[Abstract](#) | [Abstract + References](#) | [PDF](#) (2508 K)
11. ☐ **Optimising the distributed execution of join queries in polynomial time**
Computers & Mathematics with Applications, Volume 37, Issue 3, February 1999, Pages 105-126
D. J. Reid
[Abstract](#) | [Abstract + References](#) | [PDF](#) (1217 K)
12. ☐ **Partial deduction in disjunctive logic programming**
The Journal of Logic Programming, Volume 32, Issue 3, September 1997, Pages 229-245
Chiaki Sakama and Hirohisa Seki
[Abstract](#) | [Abstract + References](#) | [PDF](#) (917 K)
13. ☐ **Method to help in optimizing a query from a relational data base management system, and resultant method of syntactical analysis**
Laboratory Automation & Information Management, Volume 33, Issue 1, June 1997, Page 66
Michel Cadot
[PDF](#) (91 K)
14. ☐ **Optimizing entity join queries when data transmission cost dominates**
Data & Knowledge Engineering, Volume 22, Issue 3, May 1997, Pages 283-308
Pauray S. M. Tsai and Arbee L. P. Chen
[Abstract](#) | [Abstract + References](#) | [PDF](#) (1281 K)
15. ☐ **Manipulation of exclusive disjunctive data in relational databases**
Data & Knowledge Engineering, Volume 22, Issue 1, March 1997, Pages 39-65
Jui-Shang Chiu and Arbee L. P. Chen
[Abstract](#) | [Abstract + References](#) | [PDF](#) (1623 K)
16. ☐ **A web-based decision support system for waste disposal and recycling**
Computers, Environment and Urban Systems, Volume 21, Issue 1, January 1997, Pages 47-65
Hermant K. Bhargava and Clay Tettelbach
[Abstract](#) | [Abstract + References](#) | [PDF](#) (1566 K)
17. ☐ **A processing framework for object comprehensions**
Information and Software Technology, Volume 39, Issue 9, 1997, Pages 641-651
Daniel K. C. Chan and Philip W. Trinder
[Abstract](#) | [Abstract + References](#) | [PDF](#) (1250 K)

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Collecting Statistics over Runtime Executions
Electronic Notes in Theoretical Computer Science, Volume 70, Issue 4, December 2002, Pages 1-19
Bernd Finkbeiner, Sriram Sankaranarayanan and Henny Sipma
[Abstract](#) | [Abstract + References](#) | [PDF \(196 K\)](#)
- ☒ 2. ☐

Statistical correlation analysis in image retrieval
Pattern Recognition, Volume 35, Issue 12, December 2002, Pages 2687-2693
Mingjing Li, Zheng Chen and Hong-Jiang Zhang
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(96 K\)](#)
- ☒ 3. ☐

The effect of the Bootstrap method on additive fixed data perturbation in statistical database
Omega, Volume 30, Issue 5, October 2002, Pages 367-379
Timon C. Du, Fu-Kwun Wang and Jen-Chuan Ro
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(118 K\)](#)
- ☐ 4. ☐

Does ASA Classification Impact Success Rates of Endovascular Aneurysm Repairs?
Annals of Vascular Surgery, Volume 16, Issue 5, September 2002, Pages 550-555
Michael S. Connors III, Britt H. Tonnessen, W. Charles Sternbergh III, Glen Carter, Moises Yoselevitz and Samuel R. Money
[Abstract](#)
- ☒ 5. ☐

Join and multi-join processing in data integration systems
Data & Knowledge Engineering, Volume 40, Issue 2, February 2002, Pages 217-239
Kian-Lee Tan, Pin Kwang Eng, Beng Chin Ooi and Ming Zhang
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(617 K\)](#)
- ☒ 6. ☐

Development of a field-level geographic information system
Computers and Electronics in Agriculture, Volume 31, Issue 2, April 2001, Pages 201-209
Shane Runquist, Naiqian Zhang and Randy K. Taylor
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(278 K\)](#)
- ☒ 7. ☐


Spoken document representations for probabilistic retrieval
Speech Communication, Volume 32, Issues 1-2, September 2000, Pages 21-36
Pierre Jourlin, Sue E. Johnson, Karen Spärck Jones and Philip C. Woodland
[SummaryPlus](#) | [Full Text + Links](#) | [PDF \(583 K\)](#)
- ☒ 8. ☐

An evaluation of patent searching resources: comparing the professional and free on-line databases
World Patent Information, Volume 22, Issue 3, September 2000, Pages 147-165

Paul Schwander
SummaryPlus | Full Text + Links | PDF (2681 K)

9. ☐ **SwingStations: a web-based client tool for the Baltic environmental database**
Computers & Geosciences, Volume 25, Issue 7, August 1999, Pages 863-871
Alexander Sokolov and Fredrik Wulff
SummaryPlus | Full Text + Links | PDF (306 K)
10. ☐ **Color image retrieval using hybrid graph representation**
Image and Vision Computing, Volume 17, Issue 7, May 1999, Pages 465-474
In Kyu Park, Il Dong Yun and Sang Uk Lee
Abstract | PDF (1211 K)
11. ☐ **A probabilistic approach to navigation in Hypertext**
Information Sciences, Volume 114, Issues 1-4, March 1999, Pages 165-186
Mark Levene and George Loizou
Abstract | Abstract + References | PDF (1239 K)
12. ☐ **Parallel Construction and Query of Index Data Structures for Pattern Matching on Square Matrices**
Journal of Complexity, Volume 15, Issue 1, March 1999, Pages 30-71
Raffaele Giancarlo and Roberto Grossi
Abstract | Abstract + References | PDF (496 K)
13. ☐ **Performing automatic exams**
Computers & Education, Volume 31, Issue 3, November 1998, Pages 281-300
G. Frosini, B. Lazzerini and F. Marcelloni
SummaryPlus | Full Text + Links | PDF (3357 K)
14. ☐ **Specification and Simulation of Statistical Query Algorithms for Efficiency and Noise Tolerance**
Journal of Computer and System Sciences, Volume 56, Issue 2, April 1998, Pages 191-208
Javed A. Aslam and Scott E. Decatur
Abstract | Abstract + References | PDF (612 K)
15. ☐ **Implementing a generalized tool for network monitoring**
Information Security Technical Report, Volume 3, Issue 4, 1998, Pages 53-64
Marcus J. Ranum, Kent Landfield, Mike Stolarchuk, Mark Sienkiewicz, Andrew Lambeth and Eric Wall
Abstract | Abstract + References | PDF (1054 K)
16. ☐ **A cost model for sort-domain traversal strategy in object-oriented databases**
Journal of Systems Architecture, Volume 43, Issues 1-5, March 1997, Pages 277-283
Kim Hyeokman, Lee Sukho and Kim Hyoung-Joo
Abstract | PDF (305 K)
17. ☐ **Indexing pictorial documents by their content: a survey of current techniques**
Image and Vision Computing, Volume 15, Issue 2, February 1997, Pages 119-141
M. De Marsicoi, L. Cinque and S. Levialdi
Abstract | Abstract + References | PDF (17745 K)

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- 11 METHOD FOR OPTIMIZING POST PROCESS OF SUB SEQUENCE MATCHING IN TIME SERIES DATABASE**
Inventor: CHOI WAN (KR); KIM SANG UK (KR); (+2) Applicant: KOREA ELECTRONICS TELECOMM (KR)
EC: IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **KR20030030514** - 2003-04-18
- 12 System and method of optimizing database queries in two or more dimensions**
Inventor: SMARTT BRIAN E (US) Applicant:
EC: G06F17/30L IPC: **G06F17/30; G06F17/30**
Publication info: **US2006184519** - 2006-08-17
- 13 COMPUTER SYSTEM, COMPUTER, DATABASE ACCESS METHOD, AND DATABASE SYSTEM**
Inventor: NEMOTO NAOICHI; NISHIKAWA NORIFUMI; Applicant: HITACHI LTD
(+1)
EC: G06F17/30S8R; G06F17/30S4P3T3; (+1) IPC: **G06F12/00; G06F3/06; G06F12/00 (+1)**
Publication info: **JP2006127418** - 2006-05-18
- 14 System and method for the optimization of database access in data base networks**
Inventor: BOUKOBZA ERIC (IL) Applicant:
EC: IPC: **G06F17/30; G06F17/30**
Publication info: **US2006167883** - 2006-07-27
- 15 Optimizing database queries using query execution plans derived from automatic summary table determining cost based queries**
Inventor: LEUNG TING YU (US); SIMMEN DAVID E Applicant: IBM (US)
(US); (+1)
EC: IPC: **G06F17/30; G06F17/30**
Publication info: **US7080062** - 2006-07-18
- 16 Database System and Methodology for Generalized Order Optimization**
Inventor: YOUNG-LAI MATTHEW (CA); NICA ANISOARA Applicant: IANYWHERE SOLUTIONS INC (US)
(CA)
EC: G06F17/30H6 IPC: **G06F17/30; G06F17/30**
Publication info: **US2006136368** - 2006-06-22
- 17 Technique for determining an optimal number of tasks in a parallel database loading system with memory constraints**
Inventor: GARTH JOHN MARLAND (US); RUDDY JAMES Applicant: IBM (US)
ALAN (US); (+1)
EC: G06F17/30S2P; G06F9/46A2M IPC: **G06F9/46; G06F9/50; G06F17/30 (+2)**
Publication info: **US7058952** - 2006-06-06
- 18 DATABASE MANAGEMENT SYSTEM, METHOD FOR OPTIMIZING PAGE ARRANGEMENT IN THE SYSTEM, AND DATABASE MANAGEMENT PROGRAM**
Inventor: IDE SHUNICHI Applicant: TOKYO SHIBAURA ELECTRIC CO; TOSHIBA
SOLUTIONS CORP
EC: IPC: **G06F12/00; G06F12/08; G06F12/00 (+1)**
Publication info: **JP2006106895** - 2006-04-20
- 19 Database tuning advisor**
Inventor: RAIZMAN ALEXANDER (US); MARATHE Applicant: MICROSOFT CORP (US)
ARUNPRASAD P (US); (+9)

EC: G06F17/30B

IPC: **G06F17/30; G06F17/30**

Publication info: **US2006085484** - 2006-04-20

20 Database optimizing method

Inventor: XIE NING BI (CN)

Applicant: HUAWEI TECH CO LTD (CN)

EC:

IPC: **G06F17/30; G06F17/30**

Publication info: **CN1744079** - 2006-03-08

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21 DATABASE USEFUL FOR CONFIGURING AND/OR OPTIMIZING SYSTEM, AND METHOD FOR GENERATING THE DATABASE

Inventor: SOERENSEN MOELLER GERT LYKKE; JENSEN Applicant: ARRAY TECHNOLOGY APS
CLAUS ERIK

EC: G06F17/30S1R; G06F17/50

IPC: G06N5/04; G06F17/30; G06F17/50 (+3)

Publication info: JP2006059364 - 2006-03-02

22 Apparatus and method for optimizing a union database query

Inventor: SANTOSUOSSO JOHN M (US) Applicant: IBM (US)

EC: G06F17/30S4P3T4; G06F17/30S4P4P3

IPC: G06F17/30; G06F7/00; G06F7/00 (+1)

Publication info: US2006064407 - 2006-03-23

23 Method and apparatus for optimizing execution of database queries containing user-defined functions

Inventor: DAY PAUL R (US); MURAS BRIAN R (US) Applicant: IBM (US)

EC: G06F17/30H6

IPC: G06F17/30; G06F17/30

Publication info: US2006026116 - 2006-02-02

24 Arrangement and method for optimizing performance and data safety in a highly available database system

Inventor: PARKKINEN JARMO (FI); WOLSKI ANTONI Applicant:
(FI)

EC:

IPC: G06F17/00; G06F17/00; (IPC1-7): G06F17/00

Publication info: US2005283522 - 2005-12-22

25 SYSTEM AND METHOD FOR OPTIMIZING ROW LEVEL DATABASE SECURITY

Inventor: CHANDER GIRSH; HAMILTON JAMES R; (+3) Applicant: MICROSOFT CORP

EC: G06F21/00N9A2D

IPC: G06F21/24; G06F17/30; G06F21/00 (+4)

Publication info: JP2005228312 - 2005-08-25

26 System and method for performing a query in a computer system to retrieve data from a database

Inventor: HRLE NAMIK (DE); SCHUETZNER JOHANNES Applicant: IBM (US)
(DE)

EC: G06F17/30T2P9; G06F17/30T2P4P

IPC: G06F17/30; G06F17/30; (IPC1-7): G06F17/30

Publication info: US2005065921 - 2005-03-24

27 Database management program, a database managing method and an apparatus therefor

Inventor: SEKI YUMIKO (JP); KAMEDA MASAMI (JP); Applicant: HITACHI LTD (US)
(+2)

EC:

IPC: G06F7/00; G06F7/00; (IPC1-7): G06F7/00

Publication info: US2005033779 - 2005-02-10

28 Optimizing execution of a database query by using the partitioning schema of a partitioned object to select a subset of partitions from another partitioned object

Inventor: SHANKAR SHRIKANTH (US); SHUKLA VIKRAM Applicant:
(US)

EC:

IPC: G06F7/00; G06F7/00; (IPC1-7): G06F7/00

Publication info: US2005251511 - 2005-11-10

29 Database System with Methodology for Automated Determination and Selection of Optimal Indexes

Inventor: FARRAR DANIEL J (CA); NICA ANISOARA Applicant: SYBASE INC (US)

(CA)

EC:

IPC: **G06F17/00; G06F17/00**; (IPC1-7): G06F17/00

Publication info: **US2005203940** - 2005-09-15

30 Cost-based optimizer for an XML data repository within a database

Inventor: GE FEI (US); CHANDRASEKAR
SIVASANKARAN (US); (+3)

Applicant: ORACLE INT CORP (US)

EC:

IPC: **G06F17/00; G06F17/00**; (IPC1-7): G06F17/00

Publication info: **US2005240624** - 2005-10-27

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- 31 Method, system and program for optimizing compression of a workload processed by a database management system**
Inventor: LIGHTSTONE SAM S (CA); LOHMAN GUY M (US); (+4) Applicant: IBM (US)
EC: G06F17/30S4P3T4 IPC: **G06F7/00; G06F7/00; (IPC1-7): G06F7/00**
Publication info: **US2005192978** - 2005-09-01
- 32 SYSTEM AND METHOD FOR THE OPTIMIZATION OF DATABASE ACCESS IN DATA BASE NETWORKS**
Inventor: BOUKOBZA ERIC (IL); NISSENBOIM YORAM (IL); (+1) Applicant: ACTIVE BASE LTD (IL); BOUKOBZA ERIC (IL); (+1)
EC: H04L29/08N9A; G06F17/30B; (+1) IPC: **G06F17/30; H04L29/06; H04L29/14 (+4)**
Publication info: **WO2004036344** - 2004-04-29
- 33 Method and system for optimizing database performance**
Inventor: GUPTA SANJAY (US) Applicant: IBM (US)
EC: G06F17/30B IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**
Publication info: **US2005049992** - 2005-03-03
- 34 DATABASE MANAGING SYSTEM AND QUERY OPTIMIZING METHOD**
Inventor: UYAMA KIMITAKA; FUJITSUKA KINYA; (+2) Applicant: NTT DATA CORP
EC: IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **JP2005018430** - 2005-01-20
- 35 Methods and systems for optimizing queries through dynamic and autonomous database schema analysis**
Inventor: BOLSIUS ROGER (US); MALANEY KEVIN (US) Applicant: ORACLE INT CORP (US)
EC: G06F17/30S4P3T6; G06F17/30S4P8A IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**
Publication info: **US2004243555** - 2004-12-02
- 36 Maintenance assisting apparatus for complex system e.g. avionics, marine equipment, missiles or rockets, comprises system for setting up hierarchical database representative of system to be maintained**
Inventor: TEYCHENE CHRISTIAN Applicant: EADS LAUNCH VEHICLES (FR)
EC: IPC: **B64F5/00; B64F5/00; (IPC1-7): G06F17/60 (+1)**
Publication info: **FR2854970** - 2004-11-19
- 37 METHOD OF PRODUCING A DATABASE HAVING INPUT FROM A SCANNED DOCUMENT**
Inventor: JANSONS GIRTS (CA); TIGWELL ROB (CA) Applicant: JANSONS GIRTS (CA); TIGWELL ROB (CA)
EC: G06F17/30M1E; G06F17/30T; (+1) IPC: **G06F17/30; G06K9/20; G06F17/30 (+3)**
Publication info: **CA2427468** - 2004-11-02
- 38 Method for predicting quality characteristic of polymer uses database containing molecular mass distribution and quality characteristic for different polymerization conditions**
Inventor: HECKER MARTIN (DE); MAEHNER CHRISTIAN (DE) Applicant: BAYER AG (DE)
EC: G01N33/44 IPC: **G01N33/44; G01N33/44; (IPC1-7): G01N33/44**
Publication info: **DE10305579** - 2004-08-19
- 39 Method, system, and program for optimizing database query execution**
Inventor: ALLEN TERRY DENNIS (US); DESAI PARAMESH S (US); (+3) Applicant: IBM (US)
EC: G06F17/30S2P9 IPC: **G06F7/00; G06F17/30; G06F7/00 (+2)**

Publication info: **US2004148273** - 2004-07-29

**40 OPTIMIZING DATABASE QUERY PERFORMANCE BY DERIVING
QUERY PREDICATES**

Inventor: MALKEMUS TIMOTHY RAY (US); KOO FRED Applicant: IBM (US)
(CA)

EC: G06F17/30S4P3T2

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F17/30

Publication info: **CA2416368** - 2003-10-16

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41 Fast and robust optimization of complex database queries

Inventor: LIN EILEEN TIEN (US); LOHMAN GUY MARING (US) Applicant:

EC: G06F17/30S4P3T5J; G06F17/30S4P3T5S

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**

Publication Info: **US2004122798** - 2004-06-24

42 System and method of optimizing database queries in two or more dimensions

Inventor: SMARTT BRIAN E (US)

Applicant:

EC: G06F17/30M1S

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**

Publication info: **US2003187867** - 2003-10-02

43 SYSTEM FOR ASSIGNING DATABASE TABLE PRIMARY KEY

Inventor: SEKIHARA YASUO

Applicant: CANON KK

EC:

IPC: **G06F17/30; G06F12/00; G06F17/30 (+3)**

Publication Info: **JP2004133573** - 2004-04-30

44 Distinct sampling system and a method of distinct sampling for a database

Inventor: GIBBONS PHILLIP B (US)

Applicant: LUCENT TECHNOLOGIES INC (US)

EC: G06F17/30S4P8A; G06F17/30S4P3T3; (+1)

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**

Publication Info: **US2004049492** - 2004-03-11

45 Apparatus and method for refreshing a database query

Inventor: CARLSON DAVID GLENN (US); KATHMANN KEVIN JAMES (US) Applicant: IBM (US)

EC: G06F17/30S4P3T5; G06F17/30S4P3T6

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**

Publication Info: **US2003229621** - 2003-12-11

46 METHOD OF FACILITATING DATABASE ACCESS

Inventor: SHRINGERI SANJATHA; HSU JOY

Applicant: INFORMATICA CORP (US)

EC: G06F17/30S4P4P3J; G06F17/30S4P7R

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**

Publication Info: **WO02103575** - 2002-12-27

47 DATABASE SYSTEM AND ITS MATCHING CONTROL METHOD

Inventor: IDOGAWA AKIRA; TAKEGAWA HIROSHI; (+4) Applicant: RICOH KK

EC:

IPC: **G06F17/30; G06F12/00; G06F17/30 (+3)**

Publication Info: **JP2004013228** - 2004-01-15

48 MOVING PICTURE ENCODING CONTROLLER AND MOVING PICTURE ENCODING CONTROL DATABASE CREATING APPARATUS

Inventor: MORI MASASHI; NAKAOKA KUNIO; (+2)

Applicant: MITSUBISHI ELECTRIC CORP

EC: H04N7/26A4P; H04N7/26A6W

IPC: **H04N7/32; G03C1/00; G06T1/00 (+8)**

Publication Info: **JP2003274408** - 2003-09-26

49 Method and mechanism for extending native optimization in a database system

Inventor: AGARWAL NIPUN (US); DAS DINESH (US); (+4) Applicant:

EC: G06F17/30S4P3T6

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**

Publication info: **US2003009446** - 2003-01-09

50 Storage apparatus acquiring static information related to database management system

Inventor: MOGI KAZUHIKO (JP); OEDA TAKASHI (JP); Applicant:

(+1)

EC: G06F17/30B

IPC: G06F12/08; G06F3/06; G06F12/00 (+6)

Publication info: **US2003093442** - 2003-05-15

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51 DATABASE MANAGING SYSTEM

Inventor: HIRAOKA TAKUYA; IKEDA TETSUYA; (+2) Applicant: RICOH KK
EC: IPC: **G06F12/00; G06F12/00; (IPC1-7): G06F12/00**
Publication info: **JP2003248603** - 2003-09-05

52 Database optimization apparatus and method

Inventor: ARNOLD JEREMY ALAN (US); BARSNESS ERIC Applicant: IBM (US)
LAWRENCE (US); (+2)
EC: **G06F17/30B** IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**
Publication info: **US2003154216** - 2003-08-14

53 Database management program, a database managing method and an apparatus therefor

Inventor: SEKI YUMIKO (JP); KAMEDA MASAMI (JP); Applicant:
(+2)
EC: **G06F17/30B** IPC: **G06F11/34; G06F7/00; G06F12/00 (+6)**
Publication info: **US2002116364** - 2002-08-22

54 Method and apparatus for optimizing a security database for a self-service checkout system

Inventor: TAYLOR BRIAN (US); ALLARD JOHN (US) Applicant:
EC: **G07G1/00C2D; G07G1/14B** IPC: **G07G1/00; G07G1/14; G07G1/00 (+3)**
Publication info: **US2003126019** - 2003-07-03

55 Methods and apparatus for database transaction queuing

Inventor: ROBISON TERRY (US) Applicant:
EC: **G06F17/30B** IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**
Publication info: **US2003115168** - 2003-06-19

56 DATABASE CONSTITUTING METHOD AND DATABASE CONSTITUTING DEVICE

Inventor: ASADA KAZUSHIGE Applicant: RICOH KK
EC: IPC: **G06F17/30; G06F12/00; G06F17/30 (+3)**
Publication info: **JP2003140935** - 2003-05-16

57 Integrated database system and program storage medium

Inventor: USHIJIMA KAZUTOMO (JP); NISHIZAWA Applicant:
ITARU (JP); (+1)
EC: **G06F17/30S4P3T6; G06F19/00C9** IPC: **G06F17/30; G06F19/00; G06F17/30 (+2)**
Publication info: **US2002120618** - 2002-08-29

58 SINGLE-PATIENT DRUG TRIALS USED WITH ACCUMULATED DATABASE

Inventor: REITBERG DONALD P (US) Applicant: OPT E SCRIP INC (US); REITBERG DONALD P (US)
EC: **G06F19/00M1; G06F19/00C; (+2)** IPC: **G06F19/00; G06Q10/00; G06F19/00 (+4)**
Publication info: **WO0206826** - 2002-01-24

59 Single-patient drug trials used with accumulated database: flowchart

Inventor: REITBERG DONALD P (US) Applicant:
EC: **G06F19/00M3M; A61K49/00H; (+1)** IPC: **A61K49/00; G06F19/00; A61K49/00 (+3)**
Publication info: **US2002192159** - 2002-12-19

60 Single-patient drug trials used with accumulated database: risk of habituation

Inventor: REITBERG DONALD P (US) Applicant:

EC: G06F19/00C; G06F19/00M1; (+2)

IPC: **G06F19/00; G06Q10/00; G06F19/00** (+4)

Publication info: **US2002032581** - 2002-03-14

Data supplied from the *esp@cenet* database - Worldwide

RESULT LIST

Approximately **126** results found in the Worldwide database for:
database in the title AND **optimizing** in the title or abstract
(Results are sorted by date of upload in database)

61 Single-patient drug trials used with accumulated database: genomic markers

Inventor: REITBERG DONALD P (US)

Applicant:

EC: G06F19/00C; G06F19/00M1; (+1)

IPC: **G06F19/00; G06Q10/00; G06F19/00** (+4)

Publication info: **US2002038310** - 2002-03-28

62 Optimizing updatable scrollable cursors in database systems

Inventor: GORALWALLA IQBAL A (CA); WINER MICHAEL Applicant:

J (CA); (+2)

EC: G06F17/30B

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F7/00

Publication info: **US2002042788** - 2002-04-11

63 System and method of optimizing queries in a database

Inventor: HARVEY RICHARD H (US)

Applicant: COMPUTER ASS THINK INC (US)

EC: G06F17/30S; G06F17/30S4P3T2

IPC: **G06F12/00; G06F17/30; G06F12/00** (+2)

Publication info: **CN1505789** - 2004-06-16

64 Method and system for high performance transaction processing using a relational database management system

Inventor: CAMERON DUCAN (US); HUSTED JOHN (US); Applicant:

(+3)

EC: G06F17/30S8R; G06F17/30B

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F7/00

Publication info: **US2002174136** - 2002-11-21

65 Method for optimizing the performance of a database

Inventor: DELO JOHN C (US)

Applicant:

EC: G06F9/445N; G06F17/30B

IPC: **G06F9/445; G06F17/30; G06F9/445** (+2)

Publication info: **US2001032199** - 2001-10-18

66 Optimizing database entries

Inventor: GRIFFIN JAMES (GB); TAN SAY BENG (SG)

Applicant:

EC: G06F17/30W1F

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F7/00

Publication info: **US2002062308** - 2002-05-23

67 METHOD AND DEVICE FOR MANAGING DATABASE

Inventor: ASADA KAZUSHIGE; TAKEGAWA HIROSHI;

Applicant: RICOH KK

(+3)

EC:

IPC: **G06F17/30; G06F12/00; G06F17/30** (+3)

Publication info: **JP2002149450** - 2002-05-24

68 METHODS FOR COLLIGATION AND LINKING OF RELATIONS IN A DATABASE USEFUL FOR CONFIGURING AND/OR OPTIMIZING A SYSTEM

Inventor: MOELLER GERT LYKKE SOERENSEN (DK);

Applicant: ARRAY TECHNOLOGY APS (DK); MOELLER

JENSEN CLAUD ERIK (DK)

GERT LYKKE SOERENSEN (DK); (+1)

EC: G06F17/50

IPC: **G06F17/50; G06F17/50**; (IPC1-7): G06F17/30

Publication info: **WO0122278** - 2001-03-29

69 Query transformation and simplification for group by queries with rollup/grouping sets in relational database management systems

Inventor: LEUNG TING YU (US); WANG HAIXUN (US)

Applicant: IBM (US)

EC: G06F17/30S4P3T2; G06F17/30S4P3T5

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F17/30 (+1)

Publication info: **US6574623** - 2003-06-03

70

Method and system for managing documents in a system using at least

one database

Inventor: DAVID ANJA (DE)

EC: G06F17/30F

Publication info: **US6801902** - 2004-10-05

Applicant: WINRECHTE GBMH (DE)

IPC: **G06F17/30; G06F17/30;** (IPC1-7): G06F17/30
(+1)

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

3 results found in the Worldwide database for:

optimizing in the title AND **query and estimate** in the title or abstract

(Results are sorted by date of upload in database)

1 Method, system and program for optimizing compression of a workload processed by a database management system

Inventor: LIGHTSTONE SAM S (CA); LOHMAN GUY M Applicant: IBM (US)

(US); (+4)

EC: G06F17/30S4P3T4

IPC: **G06F7/00; G06F7/00**; (IPC1-7): G06F7/00

Publication info: **US2005192978** - 2005-09-01

2 Distinct sampling system and a method of distinct sampling for a database

Inventor: GIBBONS PHILLIP B (US)

Applicant: LUCENT TECHNOLOGIES INC (US)

EC: G06F17/30S4P8A; G06F17/30S4P3T3; (+1)

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F17/30

Publication info: **US2004049492** - 2004-03-11

3 OPTIMIZING DEVICE HAVING NEURAL NETWORK EVALUATING DEVICE

Inventor: LAKSHMI SEETHA M; ZHOU SHAOYU

Applicant: INFORMIX SOFTWARE INC

EC: G06F17/30S4P3T5S

IPC: **G06F15/18; G06F12/00; G06F17/30** (+8)

Publication info: **JP11175566** - 1999-07-02

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

2 results found in the Worldwide database for:

estimating in the title AND **query and optimizing** in the title or abstract

(Results are sorted by date of upload in database)

1 Sampling method for estimating co-occurrence counts

Inventor: MEEK CHRISTOPHER A (US); KADIE CARL M (US) Applicant: MICROSOFT CORP (US)

EC: G06F17/30S4P8A

IPC: G06F17/30; G06F17/30

Publication info: US2006184572 - 2006-08-17

2 METHOD AND DEVICE FOR ESTIMATING NUMBER OF SINGULAR VALUES OF DATA BASE

Inventor: WEIPENG YAN

Applicant: INFORMIX SOFTWARE INC

EC: G06F17/30S4P3T5S; G06F17/30S4P8A

IPC: G06F12/00; G06F17/30; G06F12/00 (+3)

Publication info: JP11134366 - 1999-05-21

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

1 result found in the Worldwide database for:

estimating in the title AND **optimizing and database** in the title or abstract
(Results are sorted by date of upload in database)

1 Sampling method for estimating co-occurrence counts

Inventor: MEEK CHRISTOPHER A (US); KADIE CARL M (US) Applicant: MICROSOFT CORP (US)

EC: G06F17/30S4P8A

IPC: G06F17/30; G06F17/30

Publication info: US2006184572 - 2006-08-17

Data supplied from the *esp@cenet* database - Worldwide

RESULT LIST

3 results found in the Worldwide database for:

optimize in the title AND **query** in the title or abstract

(Results are sorted by date of upload in database)

1 System and method to optimize database access by synchronizing state based on data access patterns

Inventor: HILL JUSTIN H (US); HOGSTROM MATT R Applicant: IBM (US)

(US); (+2)

EC:

IPC: **G06F17/30; G06F17/30**

Publication info: **US2006230019** - 2006-10-12

2 Systems and methods that optimize row level database security

Inventor: COMEAU ALAIN C (US); CHANDER GIRISH Applicant: MICROSOFT CORP (US)

(US); (+4)

EC: G06F21/00N9A2D

IPC: **G06F21/24; G06F17/30; G06F21/00** (+3)

Publication info: **EP1564620** - 2005-08-17

3 Method and system for generating SQL joins to optimize performance

Inventor: FOCAZIO ROBYN L (US); MARAPPAN KUMAR Applicant: IBM (US)

(US); (+2)

EC: G06F17/30S8R; G06F17/30S4P3T2

IPC: **G06F7/00; G06F7/00**; (IPC1-7): G06F7/00

Publication info: **US2005091199** - 2005-04-28

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

6 results found in the Worldwide database for:

query in the title AND **plans and estimate** in the title or abstract

(Results are sorted by date of upload in database)

1 Query optimization by sub-plan memoization

Inventor: CHAUDHURI SURAJIT (US); ABOULNAGA
ASHRAF I (US)

Applicant: MICROSOFT CORP (US)

EC: G06F17/30S4P3T5S

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**

Publication info: **US2005033730** - 2005-02-10

2 Estimating the compilation time of a query optimizer

Inventor: GAO DENG FENG (US); ILYAS IHAB F (US);
(+3)

Applicant:

EC: G06F17/30S4P3T6

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**

Publication info: **US2005071331** - 2005-03-31

3 Use of statistic on view in query optimization

Inventor: GALINDO-LEGARIA CESAR A (US); JOSHI
MILIND M (US)

Applicant: MICROSOFT CORP (US)

EC: G06F17/30S4P3T5; G06F17/30S4P8A

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**

Publication info: **US2005050041** - 2005-03-03

4 Database system with methodology providing improved cost estimates for query strategies

Inventor: SEPUTIS EDWIN ANTHONY (US)

Applicant: SYBASE INC (US)

EC: G06F17/30S4P3T5; G06F17/30S4P3T5S

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**

Publication info: **US6353826** - 2002-03-05

5 Identifying essential statistics for query optimization for databases

Inventor: CHAUDHURI SURAJIT (US); NARASAYYA
VIVEK (US)

Applicant: MICROSOFT CORP (US)

EC: G06F17/30S4P3T5; G06F17/30S4P3T5S; (+1)

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**

Publication info: **US6363371** - 2002-03-26

6 System for adapting query optimization effort to expected execution time

Inventor: LOHMAN GUY M (US); ONO KIYOSHI (US);
(+1)

Applicant: IBM (US)

EC: G06F17/30S4P3T5; G06F17/30S4P3T6

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F15/40**

Publication info: **US5301317** - 1994-04-05

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

20 results found in the Worldwide database for:
relational in the title AND **optimizing** in the title or abstract
(Results are sorted by date of upload in database)

- 1 Methods and systems for optimizing searches within relational databases having hierarchical data**
Inventor: GOH SWEEFEN (US); MIHAILA GEORGE A (US); (+1) Applicant: IBM (US)
EC: IPC: **G06F7/00; G06F7/00**
Publication info: **US2007005612** - 2007-01-04
- 2 Method, computer program product, and system of optimized data translation from relational data storage to hierarchical structure**
Inventor: ZHOU NIANJUN (US); MIHAILA GEORGE A (US); (+2) Applicant: IBM (US)
EC: G06F17/30S8R IPC: **G06F17/00; G06F17/30; G06F17/00 (+2)**
Publication info: **US2005138073** - 2005-06-23
- 3 Method and system for high performance transaction processing using a relational database management system**
Inventor: CAMERON DUCAN (US); HUSTED JOHN (US); Applicant: (+3)
EC: G06F17/30S8R; G06F17/30B IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**
Publication info: **US2002174136** - 2002-11-21
- 4 Query transformation and simplification for group by queries with rollup/grouping sets in relational database management systems**
Inventor: LEUNG TING YU (US); WANG HAIXUN (US) Applicant: IBM (US)
EC: G06F17/30S4P3T2; G06F17/30S4P3T5 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30 (+1)**
Publication info: **US6574623** - 2003-06-03
- 5 CUBE INDICES FOR RELATIONAL DATABASE MANAGEMENT SYSTEMS**
Inventor: COCHRANE ROBERTA JO (US); LAPIS GEORGE (US); (+4) Applicant:
EC: G06F17/30S8R; G06F17/30S4P3T3 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**
Publication info: **US2002138460** - 2002-09-26
- 6 Query optimization by transparently altering properties of relational tables using materialized views**
Inventor: COCHRANE ROBERTA JO (US); LAPIS GEORGE (US); (+6) Applicant: IBM (US)
EC: G06F17/30S8R; G06F17/30S4P3T3 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US6339769** - 2002-01-15
- 7 Optimization of queries using relational algebraic theta-semijoin operator**
Inventor: SRIVASTAVA DIVESH (US); STUCKEY PETER J Applicant: LUCENT TECHNOLOGIES INC (US) (AU); (+1)
EC: G06F17/30S4P3T2; G06F17/30S4P3T5 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US6032144** - 2000-02-29
- 8 Method for Detecting and Optimizing Relational Queries with Encoding/Decoding Tables**
Inventor: LOHMAN GUY M (US); SCHIEFER BERNHARD Applicant: IBM (US) (CA); (+1)
EC: G06F17/30S1R IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **CA2168287** - 1996-10-01
- 9 Method to help in optimizing a query from a relational data base management system**

Inventor: VACHEY ERIC (FR)

EC: G06F17/30S4P3T6

Publication info: **US5630120** - 1997-05-13

Applicant: BULL SA (FR)

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F9/00
(+1)

**10 METHOD FOR OPTIMIZATION OF QUESTION OF RELATIONAL
DATABASE**

Inventor: SURAJITSUTO CHIYAUDEYURI

EC: G06F17/30S4P3T2; G06F17/30S4P3T5

Publication info: **JP8055138** - 1996-02-27

Applicant: HEWLETT PACKARD CO

IPC: **G06F12/00; G06F17/30; G06F12/00** (+3)

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

20 results found in the Worldwide database for:
relational in the title AND **optimizing** in the title or abstract
(Results are sorted by date of upload in database)

- 11 Optimization of SQL queries using early-out join transformations of column-bound relational tables**
Inventor: PIRAHESH MIR H (US); LEUNG TING Y (US); Applicant: IBM (US)
(+3)
EC: G06F17/30S4P3T2 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US5548758** - 1996-08-20
- 12 System for optimizing correlated SQL queries in a relational database using magic decorrelation**
Inventor: LEUNG TING Y (US); PIRAHESH MIR H (US); Applicant: IBM (US)
(+1)
EC: G06F17/30S4P3T5; G06F17/30S4P3T6 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US5548755** - 1996-08-20
- 13 METHOD AND EQUIPMENT FOR OPTIMIZING INQUIRY IN RELATIONAL DATABASE SYSTEM WITH EXTERNAL FUNCTION**
Inventor: SURAJITO CHIYAUDOFURI; KIYUSEOKU SHIN Applicant: HEWLETT PACKARD CO
EC: G06F17/30S4P3T5 IPC: **G06F12/00; G06F17/30; G06F12/00 (+3)**
Publication info: **JP7141236** - 1995-06-02
- 14 Method to help in optimizing a query from a relational data base management system, and resultant method of syntactical analysis**
Inventor: CADOT MICHEL (FR) Applicant: BULL SA (FR)
EC: G06F17/30S4F5; G06F17/30S4P3T2; (+1) IPC: **G06F12/00; G06F17/30; G06F12/00 (+3)**
Publication info: **US5495605** - 1996-02-27
- 15 Computer automated system and method for optimizing the processing of a query in a relational database system by merging subqueries with the query**
Inventor: CHENG JOSEPHINE M-K (US); FINKELSTEIN SHELTON J (US); (+3) Applicant: IBM (US)
EC: G06F17/30S4P3T1; G06F17/30S4P3T5J IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F15/403**
Publication info: **US5367675** - 1994-11-22
- 16 HIGH SPEED RELATIONAL DATA BASE PROCESSOR**
Inventor: WIMER TED L (US); JOPSON CHARLES (US) Applicant: EXTENDED SYST INC (US)
EC: G06F17/30S8R IPC: **G06F9/38; G06F9/30; G06F13/00 (+6)**
Publication info: **WO8912277** - 1989-12-14
- 17 SYSTEM FOR OPTIMIZING QUERY PROCESSING IN A RELATIONAL DATABASE**
Inventor: TSUCHIDA MASASHI (JP); OHMACHI KAZUHIKO (JP) Applicant: HITACHI LTD (JP)
EC: G06F17/30S4P3T5; G06F17/30S4P3T7 IPC: **G06F12/00; G06F17/30; G06F12/00 (+3)**
Publication info: **US5091852** - 1992-02-25
- 18 OPTIMIZING SYSTEM FOR RELATIONAL DATA BASE**
Inventor: OKUDA HIROYUKI; KATO MASAMICHI Applicant: HITACHI LTD
EC: IPC: **G06F12/00; G06F17/30; G06F12/00 (+3)**
Publication info: **JP1042731** - 1989-02-15
- 19 PARTIAL COMPILING SYSTEM FOR RELATIONAL DATA BASE CONTROL SYSTEM**
Inventor: YAMANE YASUO Applicant: FUJITSU LTD
EC: IPC: **G06F9/46; G06F9/44; G06F9/45 (+8)**

Publication info: **JP62274433** - 1987-11-28

**20 INQUIRY PROCESS OPTIMIZING METHOD IN RELATIONAL DATA
BASE PROCESSING DEVICE**

Inventor: SATO KAZUHIRO; FUKUSHIMA SHINICHI; Applicant: HITACHI LTD

(+1)

EC:

IPC: **G06F12/00; G06F17/30; G06F12/00 (+2)**

Publication info: **JP61052755** - 1986-03-15

Data supplied from the *esp@cenet* database - Worldwide

RESULT LIST

13 results found in the Worldwide database for:

optimizing in the title AND **query and expression** in the title or abstract

(Results are sorted by date of upload in database)

- 1 SYSTEM AND METHOD FOR OPTIMIZING XML QUERY LANGUAGE AND VIEW DEFINITION LANGUAGE**
Inventor: BRUNDAGE MICHAEL L; KIMBALL ANDREW E Applicant: MICROSOFT CORP
EC: G06F17/30X7P3 IPC: **G06F9/45; G06F12/00; G06F17/30** (+4)
Publication info: **KR20050000328** - 2005-01-03
- 2 Apparatus and method for optimizing a union database query**
Inventor: SANTOSUOSSO JOHN M (US) Applicant: IBM (US)
EC: G06F17/30S4P3T4; G06F17/30S4P4P3 IPC: **G06F17/30; G06F7/00; G06F7/00** (+1)
Publication info: **US2006064407** - 2006-03-23
- 3 Method of optimizing SQL queries where a predicate matches nullable operands**
Inventor: LEUNG TING YU (US); TRUONG TUONG CHANH (US) Applicant: IBM (US)
EC: IPC: **G06F7/00; G06F7/00**
Publication info: **US6996557** - 2006-02-07
- 4 System and method for optimizing queries using materialized views and fast view matching**
Inventor: LARSON PER-AKE (US); GOLDSTEIN JONATHAN (US) Applicant: MICROSOFT CORP (US)
EC: G06F17/30S4P3T3; G06F17/30S4P3T1 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US2005091208** - 2005-04-28
- 5 System and method for optimizing queries on views defined by conditional expressions having mutually exclusive conditions**
Inventor: FINLAY IAN RICHARD (CA); ZUZARTE CALISTO PAUL (CA) Applicant: IBM (US)
EC: G06F17/30S4P3T1; G06F17/30S4P3T2 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US2004220896** - 2004-11-04
- 6 OPTIMIZING DATABASE QUERY PERFORMANCE BY DERIVING QUERY PREDICATES**
Inventor: MALKEMUS TIMOTHY RAY (US); KOO FRED (CA) Applicant: IBM (US)
EC: G06F17/30S4P3T2 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **CA2416368** - 2003-10-16
- 7 SELECTION OF MATERIALIZING VIEW ON THE BASIS OF COST FOR OPTIMIZING QUERY**
Inventor: GALINDO-LEGARIA CESAR A; JOSHI MILIND M Applicant: MICROSOFT CORP
EC: G06F17/30S4P3T3; G06F17/30S4P3T5 IPC: **G06F12/00; G06F17/30; G06F12/00** (+3)
Publication info: **JP2002163290** - 2002-06-07
- 8 System and method for optimizing the structure and display of complex data filters**
Inventor: MARUSAK SCOTT M (US) Applicant: SAS INST INC (US)
EC: G06F17/30S4F5; G06F17/30S4P3T4 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US6470335** - 2002-10-22
- 9 SYSTEM AND METHOD FOR OPTIMIZING DATABASE QUERIES**
Inventor: CELIS PEDRO; SHAK DIANA; (+2) Applicant: TANDEM COMPUTERS INC (US)
EC: G06F17/30S4P3T5 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **WO9826360** - 1998-06-18

10 A method for identifying key information for optimizing an SQL query

Inventor: BHARGAVA GAUTAM (US); GOEL PIYUSH Applicant: IBM (US)

(US); (+1)

EC: G06F17/30S4P3T2; G06F17/30S4P3T5

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F17/30

Publication info: **US5890148** - 1999-03-30

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

13 results found in the Worldwide database for:

optimizing in the title AND **query and expression** in the title or abstract

(Results are sorted by date of upload in database)

11 System and method for optimizing database queries with improved performance enhancements

Inventor: CELIS PEDRO (US); SHAK DIANA (US); (+2) Applicant: TANDEM COMPUTERS INC (US)

EC: G06F17/30S4P3T5

IPC: **G06F17/30**; **G06F17/30**; (IPC1-7): G06F17/30

Publication Info: **US6021405** - 2000-02-01

12 System and methods for optimizing database queries

Inventor: THAI LAM H (US)

Applicant: BORLAND INT INC (US)

EC: G06F17/30S2P1; G06F17/30S4P4P7

IPC: **G06F17/30**; **G06F17/30**; (IPC1-7): G06F17/30

Publication Info: **US5666528** - 1997-09-09

13 Computer program product for enabling a computer to generate uniqueness information for optimizing an SQL query

Inventor: BHARGAVA GAUTAM (US); GOEL PIYUSH (US); (+1) Applicant: IBM (US)

EC: G06F17/30S4P3T

IPC: **G06F17/30**; **G06F17/30**; (IPC1-7): G06F17/30

Publication Info: **US5696960** - 1997-12-09

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

2 results found in the Worldwide database for:

decomposing in the title AND **query** in the title or abstract

(Results are sorted by date of upload in database)

1 Storing fragmented XML data into a relational database by decomposing XML documents with application specific mappings

Inventor: CHAU HOANG K (US); CHENG ISAAC KAM- Applicant: IBM (US)

CHAK (US); (+5)

EC: G06F17/30S8R

IPC: G06F7/00; G06F17/30; G06F7/00 (+2)

Publication info: **US2002133484** - 2002-09-19

2 Apparatus and method for decomposing database queries for database management system including multiprocessor digital data processing system

Inventor: REINER DAVID (US); MILLER JEFFREY M Applicant: SUN MICROSYSTEMS INC (US)

(US); (+1)

EC: G06F17/30S8R

IPC: G06F12/00; G06F15/00; G06F15/16 (+7)

Publication info: **US6289334** - 2001-09-11

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

3 results found in the Worldwide database for:

tables and query in the title AND **optimizing** in the title or abstract

(Results are sorted by date of upload in database)

1 Optimizing correlated queries using automatic summary tables

Inventor: ZAHARIOUDAKIS MARKOS (US); PIRAHESH Applicant: IBM (US)

MIR HAMID (US); (+3)

EC: G06F17/30S4P3T3

IPC: **G06F7/00; G06F17/30; G06F7/00** (+2)

Publication Info: **US2003088558** - 2003-05-08

2 Parallel query optimization strategies for replicated and partitioned tables

Inventor: LEUNG TING YU (US); PIRAHESH MIR HAMID Applicant: IBM (US)

(US); (+2)

EC: G06F17/30N; G06F17/30S1R

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**

Publication info: **US6625593** - 2003-09-23

3 Query optimization by transparently altering properties of relational tables using materialized views

Inventor: COCHRANE ROBERTA JO (US); LAPIS

Applicant: IBM (US)

GEORGE (US); (+6)

EC: G06F17/30S8R; G06F17/30S4P3T3

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**

Publication info: **US6339769** - 2002-01-15

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

3 results found in the Worldwide database for:

query and grouping in the title AND **optimizing** in the title or abstract

(Results are sorted by date of upload in database)

1 Dynamic selection of optimal grouping sequence at runtime for grouping sets, rollup and cube operations in SQL query processing

Inventor: ZHANG GUOGEN (US); LIN FEN-LING (US); Applicant: IBM (US)

(+4)

EC: G06F17/30S4P3T2

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F7/00

Publication info: **US2005027690** - 2005-02-03

2 Query transformation and simplification for group by queries with rollup/grouping sets in relational database management systems

Inventor: LEUNG TING YU (US); WANG HAIXUN (US) Applicant: IBM (US)

EC: G06F17/30S4P3T2; G06F17/30S4P3T5

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F17/30
(+1)

Publication info: **US6574623** - 2003-06-03

3 Query simplification and optimization involving eliminating grouping column from group by operation corresponds to group by item that is constant

Inventor: LEUNG TING YU (US); PIRAHESH MIR HAMID Applicant: IBM (US)
(US)

EC: G06F17/30S4P3T2

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F17/30

Publication info: **US6339770** - 2002-01-15

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

11 results found in the Worldwide database for:
sql in the title AND **optimizing** in the title or abstract
(Results are sorted by date of upload in database)

- 1 Method of optimizing SQL queries where a predicate matches nullable operands**
Inventor: LEUNG TING YU (US); TRUONG TUONG CHANH (US) Applicant: IBM (US)
EC: IPC: **G06F7/00; G06F7/00**
Publication Info: **US6996557** - 2006-02-07
- 2 Dynamic selection of optimal grouping sequence at runtime for grouping sets, rollup and cube operations in SQL query processing**
Inventor: ZHANG GUOGEN (US); LIN FEN-LING (US); Applicant: IBM (US)
(+4)
EC: G06F17/30S4P3T2 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**
Publication Info: **US2005027690** - 2005-02-03
- 3 Optimization of SQL queries using filtering predicates**
Inventor: BEAVIN THOMAS A (US); MALONE PATRICK M Applicant:
(US); (+2)
EC: G06F17/30S4P3T2 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication Info: **US2002069193** - 2002-06-06
- 4 A method for identifying key information for optimizing an SQL query**
Inventor: BHARGAVA GAUTAM (US); GOEL PIYUSH Applicant: IBM (US)
(US); (+1)
EC: G06F17/30S4P3T2; G06F17/30S4P3T5 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication Info: **US5890148** - 1999-03-30
- 5 Optimization of SQL queries involving aggregate expressions using a plurality of local and global aggregation operations**
Inventor: RAMESH BHASHYAM (US); KRAUS TIMOTHY Applicant: NCR CORP (US)
BRENT (US); (+1)
EC: G06F17/30S4P3P; G06F17/30S4P4P1A IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication Info: **US5884299** - 1999-03-16
- 6 System, method, and program for extending a SQL compiler for handling control statements packaged with SQL query statements**
Inventor: CHOW JYH-HERNG (US); FUH YOU-CHIN Applicant: IBM (US)
GENE (US); (+2)
EC: G06F17/30S4F9P; G06F9/45A5; (+3) IPC: **G06F9/45; G06F17/30; G06F9/45 (+2)**
Publication info: **US5875334** - 1999-02-23
- 7 Optimization of SQL queries using hash star join operations**
Inventor: PEDERSON DONALD RAYMOND (US); Applicant: NCR CORP (US)
KOSTAMAA OLLI PEKKA (US)
EC: G06F17/30S8M; G06F17/30S4P3P; (+1) IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US5864842** - 1999-01-26
- 8 Optimization of SQL queries using early-out join transformations of column-bound relational tables**
Inventor: PIRAHESH MIR H (US); LEUNG TING Y (US); Applicant: IBM (US)
(+3)
EC: G06F17/30S4P3T2 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication Info: **US5548758** - 1996-08-20
- 9 Computer program product for enabling a computer to generate uniqueness information for optimizing an SQL query**
Inventor: BHARGAVA GAUTAM (US); GOEL PIYUSH Applicant: IBM (US)
(US); (+1)

EC: G06F17/30S4P3T

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F17/30

Publication info: **US5696960** - 1997-12-09

10 System for optimizing correlated SQL queries in a relational database using magic decorrelation

Inventor: LEUNG TING Y (US); PIRAHESH MIR H (US); Applicant: IBM (US)
(+1)

EC: G06F17/30S4P3T5; G06F17/30S4P3T6 :

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F17/30

Publication info: **US5548755** - 1996-08-20

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

11 results found in the Worldwide database for:
sql in the title AND **optimizing** in the title or abstract
(Results are sorted by date of upload in database)

11 Optimization of SQL queries using universal quantifiers, set intersection, and max/min aggregation in the presence of nullable columns

Inventor: LEUNG TING Y (US); PIRAHESH MIR H (US); Applicant: IBM (US)
(+2)

EC: G06F17/30S4P3T2; G06F17/30S4P3T5

IPC: **G06F17/30; G06F17/30**; (IPC1-7): G06F17/30

Publication info: **US5590324** - 1996-12-31

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

Approximately **141** results found in the Worldwide database for:
database in the title AND **optimizing** in the title or abstract
(Results are sorted by date of upload in database)

1 OPTIMIZING ACCESS TO A DATABASE BY UTILIZING A STAR JOIN

Inventor: AU GRACE (US); RAMESH BHASHYAM (IN); Applicant:
(+1)

EC: IPC: **G06F17/30; G06F17/30**

Publication info: **US2007083490** - 2007-04-12

2 OPTIMIZING ACCESS TO A DATABASE

Inventor: AU GRACE (US); RAMESH BHASHYAM (IN); Applicant:
(+1)

EC: IPC: **G06F17/30; G06F17/30**

Publication info: **US2007073647** - 2007-03-29

3 METHOD AND SYSTEM FOR OPTIMIZING USER DATABASE QUERIES

Inventor: RAMESH BHASHYAM (IN); WATZKE MICHAEL Applicant:
(US)

EC: IPC: **G06F17/30; G06F17/30**

Publication info: **US2007067262** - 2007-03-22

4 OPTIMIZED DATABASE COORDINATION AND SUPPLY CHAIN EFFICIENCY

Inventor: HULL JACKSON ROBIE (US); LAI CALBERT Applicant: SITO A CORP (US); HULL JACKSON ROBIE
(US); (+3) (US); (+4)

EC: IPC: **G06Q30/00; G06Q30/00**

Publication info: **WO2007021920** - 2007-02-22

5 OPTIMIZING DATABASE ACCESS FOR RECORD LINKAGE BY TILING THE SPACE OF RECORD PAIRS

Inventor: GIANG PHAN H (US); SANDILYA Applicant: SIEMENS MEDICAL SOLUTIONS (US)
SATHYAKAMA (GB); (+2)

EC: IPC: **G06F17/30; G06F17/30**

Publication info: **EP1730655** - 2006-12-13

6 Apparatus and method for optimizing a computer database query that Fetches n rows

Inventor: MURAS BRIAN R (US); NELSON ROBERT R Applicant: IBM (US)
(US); (+1)

EC: IPC: **G06F17/30; G06F17/30**

Publication info: **US2006259457** - 2006-11-16

7 SYSTEM AND METHOD FOR USING GRID INDEX FOR ENCODING LOCATION AND ESTIMATED ACCURACY VALUE OF COORDINATES VALUE FOR DATABASE ENTRY

Inventor: TOYAMA KENTARO; LOGAN RON Applicant: MICROSOFT CORP

EC: **G06F17/30C; G06F17/30L; (+1)** IPC: **G09B29/00; G06F12/00; G06F17/30 (+4)**

Publication info: **KR20040095751** - 2004-11-15

8 CELL LIBRARY DATABASE CONSTRUCTING METHOD USING INPUT STATE DEPENDENCY ALGORITHM OPTIMIZING DATABASE SIZE AND MARGINAL DESIGN VERIFICATION

Inventor: KIM DU JIN (KR) Applicant: SAMSUNG ELECTRONICS CO LTD (KR)

EC: IPC: **G06F17/50; G06F17/50; (IPC1-7): G06F17/50**

Publication info: **KR20050048422** - 2005-05-24

9 Database performance analysis

Inventor: GRAY JON (GB) Applicant: COGITO LTD (GB)

EC: IPC: **G06F17/30; G06F17/30**

Publication info: **GB2425625** - 2006-11-01

**10 SYSTEM AND METHOD FOR DESIGNING VEHICLE WIRING HARNESS
BY USING DATABASE**

Inventor: KIM DAE SEONG (KR)

Applicant: HYUNDAI MOTOR CO LTD (KR)

EC:

IPC: **G06F17/50**; **G06F17/50**; (IPC1-7): G06F17/50

Publication info: **KR20030081675** - 2003-10-22

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

11 results found in the Worldwide database for:

query in the title AND **optimizing and tables** in the title or abstract

(Results are sorted by date of upload in database)

- 1 Optimizing database queries using query execution plans derived from automatic summary table determining cost based queries**
Inventor: LEUNG TING YU (US); SIMMEN DAVID E Applicant: IBM (US)
(US); (+1)
EC: IPC: **G06F17/30; G06F17/30**
Publication info: **US7080062** - 2006-07-18
- 2 Optimizing execution of a database query by using the partitioning schema of a partitioned object to select a subset of partitions from another partitioned object**
Inventor: SHANKAR SHRIKANTH (US); SHUKLA VIKRAM Applicant:
(US)
EC: IPC: **G06F7/00; G06F7/00; (IPC1-7): G06F7/00**
Publication info: **US2005251511** - 2005-11-10
- 3 OPTIMIZING DATABASE QUERY PERFORMANCE BY DERIVING QUERY PREDICATES**
Inventor: MALKEMUS TIMOTHY RAY (US); KOO FRED Applicant: IBM (US)
(CA)
EC: **G06F17/30S4P3T2** IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **CA2416368** - 2003-10-16
- 4 Matching groupings, re-aggregation avoidance and comprehensive aggregate function derivation rules in query rewrites using materialized views**
Inventor: ZHANG GUOGEN (US); LI RUIPING (US); Applicant: IBM (US)
(+2)
EC: **G06F17/30S4P3T3; G06F17/30S1R; (+1)** IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30 (+1)**
Publication info: **US2004122814** - 2004-06-24
- 5 Optimizing correlated queries using automatic summary tables**
Inventor: ZAHARIOUDAKIS MARKOS (US); PIRAHESH Applicant: IBM (US)
MIR HAMID (US); (+3)
EC: **G06F17/30S4P3T3** IPC: **G06F7/00; G06F17/30; G06F7/00 (+2)**
Publication info: **US2003088558** - 2003-05-08
- 6 Systems and methods for providing structured query language optimization**
Inventor: TOW DANIEL S (US) Applicant:
EC: **G06F17/30G3; G06F17/30S1R** IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30 (+1)**
Publication info: **US2004064441** - 2004-04-01
- 7 Optimizing a query using a non-covering join index**
Inventor: AU GRACE KWAN-ON (US); GHAZAL AHMAD Applicant: NCR CORP (US)
SAID (US); (+1)
EC: **G06F17/30S4P3T5S; G06F17/30S4P3T2** IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US6643636** - 2003-11-04
- 8 Parallel query optimization strategies for replicated and partitioned tables**
Inventor: LEUNG TING YU (US); PIRAHESH MIR HAMID Applicant: IBM (US)
(US); (+2)
EC: **G06F17/30N; G06F17/30S1R** IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US6625593** - 2003-09-23
- 9 Query optimization by transparently altering properties of relational**

tables using materialized views

Inventor: COCHRANE ROBERTA JO (US); LAPIS
GEORGE (US); (+6)

EC: G06F17/30S8R; G06F17/30S4P3T3

Applicant: IBM (US)

IPC: **G06F17/30; G06F17/30;** (IPC1-7): G06F17/30

Publication info: **US6339769** - 2002-01-15

10 Optimizing table join ordering using graph theory prior to query optimization

Inventor: GRAY JAMES E (US)

Applicant: BULL HN INFORMATION SYST (US)

EC: G06F17/30S4P3T6; G06F17/30S4P3T5J

IPC: **G06F17/30; G06F17/30;** (IPC1-7): G06F17/30

Publication info: **US5758335** - 1998-05-26

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

11 results found in the Worldwide database for:

query in the title AND **optimizing and tables** in the title or abstract

(Results are sorted by date of upload in database)

11 System, method, and program for extending a SQL compiler for handling control statements packaged with SQL query statements

Inventor: CHOW JYH-HERNG (US); FUH YOU-CHIN Applicant: IBM (US)

GENE (US); (+2)

EC: G06F17/30S4F9P; G06F9/45A5; (+3)

IPC: **G06F9/45; G06F17/30; G06F9/45** (+2)

Publication info: **US5875334** - 1999-02-23

Data supplied from the *esp@cenet* database - Worldwide

RESULT LIST

7 results found in the Worldwide database for:

optimizing in the title AND **database and expressions** in the title or abstract

(Results are sorted by date of upload in database)

1 METHOD AND SYSTEM FOR OPTIMIZING USER DATABASE QUERIES

Inventor: RAMESH BHASHYAM (IN); WATZKE MICHAEL Applicant: (US)

EC:

IPC: G06F17/30; G06F17/30

Publication info: US2007067262 - 2007-03-22

2 SYSTEM AND METHOD FOR OPTIMIZING ROW LEVEL DATABASE SECURITY

Inventor: CHANDER GIRSH; HAMILTON JAMES R; (+3) Applicant: MICROSOFT CORP

EC: G06F21/00N9A2D

IPC: G06F21/24; G06F17/30; G06F21/00 (+4)

Publication info: JP2005228312 - 2005-08-25

3 Optimizing correlated queries using automatic summary tables

Inventor: ZAHARIOUDAKIS MARKOS (US); PIRAHESH Applicant: IBM (US)
MIR HAMID (US); (+3)

EC: G06F17/30S4P3T3

IPC: G06F7/00; G06F17/30; G06F7/00 (+2)

Publication info: US2003088558 - 2003-05-08

4 Method of simplifying and optimizing scalar subqueries and derived tables that return exactly or at most one tuple

Inventor: LEUNG TING YU (US); URATA MONICA Applicant: IBM (US)
SACHIYE (US); (+1)

EC: G06F17/30S4P3T1

IPC: G06F17/30; G06F17/30; (IPC1-7): G06F17/30

Publication info: US6826562 - 2004-11-30

5 SYSTEM AND METHOD FOR OPTIMIZING DATABASE QUERIES

Inventor: CELIS PEDRO; SHAK DIANA; (+2)

Applicant: TANDEM COMPUTERS INC (US)

EC: G06F17/30S4P3T5

IPC: G06F17/30; G06F17/30; (IPC1-7): G06F17/30

Publication info: WO9826360 - 1998-06-18

6 System and method for optimizing database queries with improved performance enhancements

Inventor: CELIS PEDRO (US); SHAK DIANA (US); (+2) Applicant: TANDEM COMPUTERS INC (US)

EC: G06F17/30S4P3T5

IPC: G06F17/30; G06F17/30; (IPC1-7): G06F17/30

Publication info: US6021405 - 2000-02-01

7 Computer automated system and method for optimizing the processing of a query in a relational database system by merging subqueries with the query

Inventor: CHENG JOSEPHINE M-K (US); FINKELSTEIN Applicant: IBM (US)
SHELDON J (US); (+3)

EC: G06F17/30S4P3T1; G06F17/30S4P3T5J

IPC: G06F17/30; G06F17/30; (IPC1-7): G06F15/403

Publication info: US5367675 - 1994-11-22

Data supplied from the *esp@cenet* database - Worldwide

RESULT LIST

3 results found in the Worldwide database for:

tables and query in the title AND **optimizing** in the title or abstract

(Results are sorted by date of upload in database)

1 Optimizing correlated queries using automatic summary tables

Inventor: ZAHARIOUDAKIS MARKOS (US); PIRAHESH Applicant: IBM (US)

MIR HAMID (US); (+3)

EC: G06F17/30S4P3T3

IPC: G06F7/00; G06F17/30; G06F7/00 (+2)

Publication info: **US2003088558** - 2003-05-08

2 Parallel query optimization strategies for replicated and partitioned tables

Inventor: LEUNG TING YU (US); PIRAHESH MIR HAMID Applicant: IBM (US)

(US); (+2)

EC: G06F17/30N; G06F17/30S1R

IPC: G06F17/30; G06F17/30; (IPC1-7): G06F17/30

Publication info: **US6625593** - 2003-09-23

3 Query optimization by transparently altering properties of relational tables using materialized views

Inventor: COCHRANE ROBERTA JO (US); LAPIS

Applicant: IBM (US)

GEORGE (US); (+6)

EC: G06F17/30S8R; G06F17/30S4P3T3

IPC: G06F17/30; G06F17/30; (IPC1-7): G06F17/30

Publication info: **US6339769** - 2002-01-15

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

11 results found in the Worldwide database for:
sql in the title AND **optimizing** in the title or abstract
(Results are sorted by date of upload in database)

- 1 Method of optimizing SQL queries where a predicate matches nullable operands**
Inventor: LEUNG TING YU (US); TRUONG TUONG CHANH (US) Applicant: IBM (US)
EC: IPC: **G06F7/00; G06F7/00**
Publication info: **US6996557** - 2006-02-07
- 2 Dynamic selection of optimal grouping sequence at runtime for grouping sets, rollup and cube operations in SQL query processing**
Inventor: ZHANG GUOGEN (US); LIN FEN-LING (US); Applicant: IBM (US)
(+4)
EC: G06F17/30S4P3T2 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**
Publication info: **US2005027690** - 2005-02-03
- 3 Optimization of SQL queries using filtering predicates**
Inventor: BEAVIN THOMAS A (US); MALONE PATRICK M Applicant:
(US); (+2)
EC: G06F17/30S4P3T2 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US2002069193** - 2002-06-06
- 4 A method for identifying key information for optimizing an SQL query**
Inventor: BHARGAVA GAUTAM (US); GOEL PIYUSH Applicant: IBM (US)
(US); (+1)
EC: G06F17/30S4P3T2; G06F17/30S4P3T5 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US5890148** - 1999-03-30
- 5 Optimization of SQL queries involving aggregate expressions using a plurality of local and global aggregation operations**
Inventor: RAMESH BHASHYAM (US); KRAUS TIMOTHY Applicant: NCR CORP (US)
BRENT (US); (+1)
EC: G06F17/30S4P3P; G06F17/30S4P4P1A IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US5884299** - 1999-03-16
- 6 System, method, and program for extending a SQL compiler for handling control statements packaged with SQL query statements**
Inventor: CHOW JYH-HERNG (US); FUH YOU-CHIN Applicant: IBM (US)
GENE (US); (+2)
EC: G06F17/30S4F9P; G06F9/45A5; (+3) IPC: **G06F9/45; G06F17/30; G06F9/45 (+2)**
Publication info: **US5875334** - 1999-02-23
- 7 Optimization of SQL queries using hash star join operations**
Inventor: PEDERSON DONALD RAYMOND (US); Applicant: NCR CORP (US)
KOSTAMAA OLLI PEKKA (US)
EC: G06F17/30S8M; G06F17/30S4P3P; (+1) IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US5864842** - 1999-01-26
- 8 Optimization of SQL queries using early-out join transformations of column-bound relational tables**
Inventor: PIRAHESH MIR H (US); LEUNG TING Y (US); Applicant: IBM (US)
(+3)
EC: G06F17/30S4P3T2 IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US5548758** - 1996-08-20
- 9 Computer program product for enabling a computer to generate uniqueness information for optimizing an SQL query**
Inventor: BHARGAVA GAUTAM (US); GOEL PIYUSH Applicant: IBM (US)
(US); (+1)

EC: G06F17/30S4P3T

IPC: **G06F17/30**; **G06F17/30**; (IPC1-7): G06F17/30

Publication info: **US5696960** - 1997-12-09

10 System for optimizing correlated SQL queries in a relational database using magic decorrelation

Inventor: LEUNG TING Y (US); PIRAHESH MIR H (US); Applicant: IBM (US)
(+1)

EC: G06F17/30S4P3T5; G06F17/30S4P3T6

IPC: **G06F17/30**; **G06F17/30**; (IPC1-7): G06F17/30

Publication info: **US5548755** - 1996-08-20

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

11 results found in the Worldwide database for:
sql in the title AND **optimizing** in the title or abstract
(Results are sorted by date of upload in database)

11 Optimization of SQL queries using universal quantifiers, set intersection, and max/min aggregation in the presence of nullable columns

Inventor: LEUNG TING Y (US); PIRAHESH MIR H (US); Applicant: IBM (US)
(+2)

EC: G06F17/30S4P3T2; G06F17/30S4P3T5

IPC: **G06F17/30**; **G06F17/30**; (IPC1-7): G06F17/30

Publication info: **US5590324** - 1996-12-31

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

4 results found in the Worldwide database for:

statistics and query in the title AND **tables** in the title or abstract

(Results are sorted by date of upload in database).

1 Generating statistics for temporary tables during query optimization

Inventor: DRIESCH ROBERT D JR (US); EDWARDS JOHN F (US); (+2) Applicant: IBM (US)

EC: G06F17/30S8R; G06F17/30S4P3T5S

IPC: **G06F17/30; G06F17/30**

Publication info: **US2007043697** - 2007-02-22

2 Using data in materialized query tables as a source for query optimization statistics

Inventor: SIMMEN DAVID E (US)

Applicant: IBM

EC: G06F17/30S4P3T5

IPC: **G06F17/30; G06F7/00; G06F7/00 (+1)**

Publication info: **US2006036576** - 2006-02-16

3 Method and apparatus for using conditional selectivity as foundation for exploiting statistics on query expressions

Inventor: BRUNO NICOLAS (US); CHAUDHURI SURAJIT (US) Applicant: MICROSOFT CORP (US)

EC: G06F17/30S4P3T5S; G06F17/30S4P8A

IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F7/00**

Publication info: **US2005004907** - 2005-01-06

4 Method and apparatus for generating statistics on query expressions for optimization

Inventor: CHAUDHURI SURAJIT (US); BRUNO NICOLAS (US) Applicant: MICROSOFT CORP (US)

EC:

IPC: **G06F17/00; G06F17/00; (IPC1-7): G06F17/00**

Publication info: **US2004236762** - 2004-11-25

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RESULT LIST

3 results found in the Worldwide database for:
sql in the title AND **statistics** in the title or abstract
(Results are sorted by date of upload in database)

1 Adaptive database buffer memory management using dynamic SQL statement cache statistics

Inventor: GORDON MARK R (US)

Applicant: IBM (US)

EC: G06F17/30H

IPC: **G06F17/30**; **G06F17/30**

Publication info: **US2006074872** - 2006-04-06

2 High load SQL driven statistics collection

Inventor: DAGEVILLE BENOIT (US); ZIAUDDIN MOHAMED (US); (+2)

Applicant: ORACLE INT CORP (US)

EC:

IPC: **G06F17/00**; **G06F17/00**; (IPC1-7): G06F17/00

Publication info: **US2005138015** - 2005-06-23

3 Auto-tuning SQL statements

Inventor: ZIAUDDIN MOHAMED (US); DAGEVILLE BENOIT (US); (+2)

Applicant: ORACLE INT CORP (US)

EC:

IPC: **G06F17/30**; **G06F17/30**; (IPC1-7): G06F17/30

Publication info: **US2005120000** - 2005-06-02

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

10 results found in the Worldwide database for:
expressions in the title AND **optimizing** in the title or abstract
(Results are sorted by date of upload in database)

- 1 Optimizing XSLT based on input XML document structure description and translating XSLT into equivalent XQuery expressions**
Inventor: LIU ZHEN H (US); KRISHNAPRASAD MURALIDHAR (US); (+1)
EC: G06F17/22T2; G06F17/22M
IPC: G06F17/00; G06F17/30; G06F17/00 (+1)
Publication info: US2006242563 - 2006-10-26
- 2 ANALYZING INDUCTIVE EXPRESSIONS IN A MULTI-LANGUAGE OPTIMIZING COMPILER**
Inventor: BLICKSEIN DAVID SCOTT (US); DAVIDSON CAROLINE SWEENEY (US); (+4)
EC: G06F9/45C1; G06F9/45C3T; (+2)
IPC: G06F9/45; G06F9/45; (IPC1-7): G06F9/45
Publication info: KR960003138B - 1996-03-05
- 3 System and method for optimizing polynomial expressions in a processing environment**
Inventor: FALLAH FARZAN (US)
EC:
IPC: G06F7/38; G06F7/38
Publication info: US2006075011 - 2006-04-06
- 4 System and method for optimizing queries on views defined by conditional expressions having mutually exclusive conditions**
Inventor: FINLAY IAN RICHARD (CA); ZUZARTE CALISTO PAUL (CA)
EC: G06F17/30S4P3T1; G06F17/30S4P3T2
IPC: G06F17/30; G06F17/30; (IPC1-7): G06F17/30
Publication info: US2004220896 - 2004-11-04
- 5 METHOD AND SYSTEM FOR INTERACTIVE BUILDING AND OPTIMIZATION OF SEARCH EXPRESSIONS**
Inventor: BREIVIK JARLE (NO)
EC: G06F17/30W3; G06F17/30Z2F1
IPC: G06F17/30; G06F17/30; (IPC1-7): G06F17/30
Publication info: WO0241185 - 2002-05-23
- 6 Optimization of SQL queries involving aggregate expressions using a plurality of local and global aggregation operations**
Inventor: RAMESH BHASHYAM (US); KRAUS TIMOTHY BRENT (US); (+1)
EC: G06F17/30S4P3P; G06F17/30S4P4P1A
IPC: G06F17/30; G06F17/30; (IPC1-7): G06F17/30
Publication info: US5884299 - 1999-03-16
- 7 Compiler optimizer that moves loop invariant expressions**
Inventor: HIRAI SHINJI (JP)
EC: G06F9/45E3
IPC: G06F9/45; G06F9/45; (IPC1-7): G06F9/45
Publication info: US5862384 - 1999-01-19
- 8 Analyzing inductive expressions in a multilanguage optimizing compiler**
Inventor: BLICKSTEIN DAVID S (US)
EC: G06F9/45C1; G06F9/45E3; (+1)
IPC: G06F9/45; G06F9/45; (IPC1-7): G06F9/45
Publication info: US5577253 - 1996-11-19
- 9 Compiling apparatus having a function to analyze overlaps of memory addresses of two or more data expressions and a compiling method**
Inventor: HAYASHI MASAKAZU (JP); NAKAHIRA TADASHI (JP)
EC: G06F9/45C1A
IPC: G06F9/45; G06F9/45; (IPC1-7): G06F9/44

Publication info: **US5581762** - 1996-12-03

**10 COMPILING COMPUTER CODE: OPTIMIZING INTERMEDIATE
LANGUAGE FLOW GRAPH USING ROUTINE TO FOLD CONSTANT
EXPRESSIONS**

Inventor: FAIMAN ROBERT NEIL

Applicant: DIGITAL EQUIPMENT CORP

EC: G06F9/45C1; G06F9/45E3; (+1)

IPC: **G06F9/45**; **G06F9/45**; (IPC1-7): G06F9/45

Publication info: **NZ241694** - 1994-11-25

Data supplied from the **esp@cenet** database - Worldwide

RESULT LIST

6 results found in the Worldwide database for:

statistics in the title AND **database and tables** in the title or abstract

(Results are sorted by date of upload in database)

- 1 Generating statistics for temporary tables during query optimization**
Inventor: DRIESCH ROBERT D JR (US); EDWARDS JOHN F (US); (+2) Applicant: IBM (US)
EC: G06F17/30S8R; G06F17/30S4P3T5S IPC: **G06F17/30; G06F17/30**
Publication info: **US2007043697** - 2007-02-22
- 2 Method, system, and program for collecting statistics of data stored in a database**
Inventor: LIGHTSTONE SAM S (CA); POPIVANOV IVAN (CA); (+1) Applicant: IBM (US)
EC: G06F17/30B IPC: **G06F17/30; G06F17/30**
Publication info: **US2006112093** - 2006-05-25
- 3 System and method for externally providing database optimizer statistics**
Inventor: SAUERMAN VOLKER (DE) Applicant:
EC: G06F17/30S8R; G06F17/30B IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US2005262158** - 2005-11-24
- 4 System and method for gathering and analyzing database performance statistics**
Inventor: MAROKHOVSKY SERGE G (US); CHEN SHUZI (US); (+2) Applicant: EMC CORP (US)
EC: IPC: **G06F17/30; G06F17/30; (IPC1-7): G06F17/30**
Publication info: **US6804627** - 2004-10-12
- 5 System and method for real time statistics collection for use in the automatic management of a database system**
Inventor: BONNER CHARLES ROY (US); HRLE NAMIK (DE); (+1) Applicant: IBM (US)
EC: G06F17/30B IPC: **G06F7/00; G06F17/30; G06F7/00 (+2)**
Publication info: **US2004034643** - 2004-02-19
- 6 Method for extracting statistical profiles, use of the statistics created by the method.**
Inventor: ANDRES FREDERIC (FR) Applicant: BULL SA (FR)
EC: G06F17/30S4P8A; G06F11/34M IPC: **G06F11/34; G06F12/00; G06F17/30 (+4)**
Publication info: **EP0599707** - 1994-06-01

Data supplied from the **esp@cenet** database - Worldwide